

AD-A033 704

AIR FORCE OCCUPATIONAL MEASUREMENT CENTER LACKLAND A--ETC F/6 5/9
PRECISION PHOTOGRAPHIC SYSTEMS REPAIR/AEROSPACE PHOTOGRAPHIC SY--ETC(U)
NOV 76

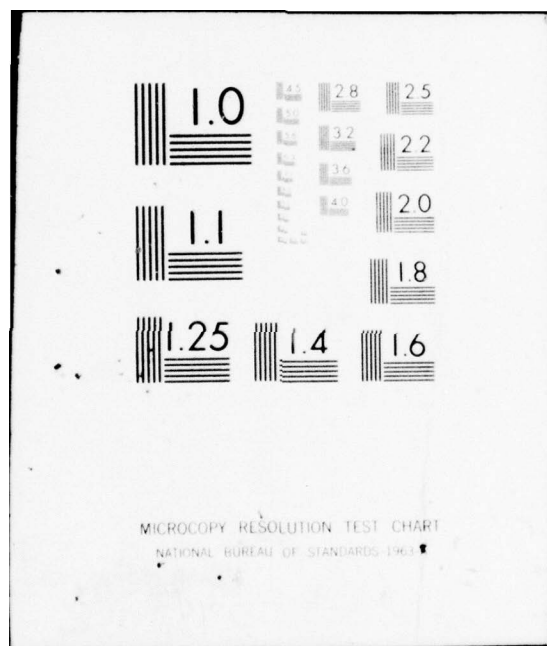
UNCLASSIFIED

AFPT-90-404-206

NL

1 OF 1
AD
A033704





ADA033704

9 OCCUPATIONAL SURVEY REPORT.



DDC
RECEIVED
DEC 27 1976
RECEIVED

A *[Signature]*

6 PRECISION PHOTOGRAPHIC SYSTEMS REPAIR/
AEROSPACE PHOTOGRAPHIC SYSTEMS REPAIR
CAREER LADDERS,
AFSCs 40430, 40450, 40470, 40431, 40451,
40471, AND 40491.

14 AFPT-90-404-206

11 15 NOVEMBER 1976

12 80p.

OCCUPATIONAL SURVEY BRANCH
USAF OCCUPATIONAL MEASUREMENT CENTER
LACKLAND AFB TEXAS 78236

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

408 889
[Signature]

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	2
SUMMARY OF RESULTS	3
INTRODUCTION	5
INVENTORY DEVELOPMENT AND ADMINISTRATION	5
SUMMARY OF BACKGROUND INFORMATION	8
CAREER LADDER STRUCTURE	15
COMPARISON OF AFM 39-1 WITH SURVEY RESULTS	21
ANALYSIS OF DAFSC GROUPS	22
ANALYSIS OF AFMS GROUPS	29
ANALYSIS OF CONUS/OVERSEAS GROUPS	36
ANALYSIS OF 404X0 BASE PHOTO/MOTION PICTURE LAB AND RECONNAISSANCE WORK SITE GROUPS	39
COMPARISON OF THE 404X0 SPECIALTY TRAINING STANDARD (STS) WITH SURVEY RESULTS	43
COMPARISON OF THE 404X1 SPECIALTY TRAINING STANDARD (STS) WITH SURVEY RESULTS	48
COMPARISON TO PREVIOUS SURVEY	49
CONCLUSIONS AND RECOMMENDATIONS	52
APPENDIX A	53

ACCESSION NO.	
STIS	With Section
DOC	With Section
ANNOUNCES	With Section
JUSTIFICATION	With Section
BY	BY
DISTRIBUTION / AVAILABILITY CODES	BY
Dist.	AVAIL. and / or SPECIAL

PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Precision Photographic Systems Repair/Aerospace Photographic Systems Repair career ladders, AFSCs 40430, 40450, 40470, 40431, 40451, 40471, and 40491. The project was directed by USAF Program Technical Training, Volume 2, dated January 1975. Authority for conducting specialty surveys is contained in AFM 35-2, paragraph 2-1. Computer outputs from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by Captain James N. Eustis, Inventory Development Specialist. 1Lt Carole J. Kopala and Mr. James B. Keeth analyzed the survey data and wrote the final report. This report has been reviewed and approved by Major Thomas J. O'Connor, Chief, Operations/Support Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AFB, Texas, 78236.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Because volume reproduction of this report is not feasible, distribution is made on a loan basis to air staff sections and major commands upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

JAMES A. TURNER, JR, Col, USAF
Commander
USAF Occupational Measurement Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Survey Branch
USAF Occupational Measurement Center

SUMMARY OF RESULTS

1. Survey Coverage: The results of this report are based on responses from 72 percent of the members of the Precision Photographic Systems Repair and Aerospace Photographic Systems Repair career ladders.

2. Career Ladder Structure: The 25 groups identified formed the following three major divisions:

- I 404X1 Job Groups
- II 404X0/404X1 Job Groups
- III 404X0 Job Groups

Each group is discussed in the CAREER LADDER STRUCTURE section of this report and in Appendix A.

3. DAFSC and AFMS Patterns: A comparison of the tasks performed by members of the 404X0 and 404X1 career ladders revealed an almost complete dichotomy of technical duty areas. Within both ladders, the percentage of incumbents performing supervisory tasks increased as TAFMS and DAFSC level increased. However, only in the 404X0 ladder did the number of technical tasks performed decrease as these supervisory tasks were assumed.

4. CONUS/Overseas Patterns: A comparison of task performance between 40451 incumbents stationed overseas and incumbents stationed in the CONUS revealed that the CONUS jobs were more diversified. Within the 40450 DAFSC, a significantly larger percentage of overseas members were stationed in mobility labs or at reconnaissance sites.

5. Comparison of AFM 39-1 with Survey Results: The general descriptions contained in AFM 39-1 were found to be substantiated by actual tasks performed at each skill level within each ladder. The one exception was omission of the operation and maintenance of Weapon System Evaluation Missile (WSEM) Tapes from the 40431/51 job description.

6. Comparison of Specialty Training Standards (STSs) with Survey Results: Comparison of the survey data with the 404X0 and 404X1 STSs showed that most STS paragraphs were appropriate.

7. Comparison of Training With Survey Results: A comparison of the Plan of Instruction (POI) for the 3ABR40430 course with survey data revealed a low percentage of first job incumbents performing tasks related to the 20.5-hour block of instruction on the 6100C electronic narrow film contact printer and the 6170D programmer.

A comparison of the 3ABR40431 course POI with survey data revealed that a very low percentage of first job incumbents performed tasks related to strike camera pods, yet 14 hours of instruction are included in the curriculum. Conversely, relatively high percentages of first job incumbents performed tasks related to WSEM tape processing and processor maintenance, yet these items are not taught in the resident course.

8. Job Satisfaction: Seventy-one percent of the 404X0 incumbents found their job interesting. This rate was slightly above the 69 percent rate for personnel in 35 other career ladders surveyed in 1975. The 404X1 respondents, on the other hand, indicated a much lower degree of job satisfaction, with only 52 percent of these members finding their job interesting.

9. Career Field Input: In both ladders, the primary method of entry into the career field was completion of resident technical training, with 70 percent of 404X0 personnel and 71 percent of the 404X1 personnel entering through this method. Retraining from another specialty was the second most frequent method, with 19 percent and 15 percent of the 404X0 and 404X1 incumbents, respectively, entering in this manner.

10. Reenlistment Rates: The actual reenlistment rates for 404X0 incumbents during FY 76 showed 46 percent of the first term-airmen, 79 percent of the second-term airmen, and 90 percent of the career airmen reenlisting. Reenlistment rates of 404X1 incumbents for this same period showed that 59 percent of the first-term airmen, 57 percent of the second-term airmen, and 93 percent of the career airmen reenlisted.

OCCUPATIONAL SURVEY REPORT
PRECISION PHOTOGRAPHIC SYSTEMS REPAIR/AEROSPACE PHOTOGRAPHIC
SYSTEMS REPAIR CAREER LADDERS
AFSCs 40430, 40450, 40470, 40431, 40451, 40471, and 40491

INTRODUCTION

This is a report of an occupational survey of the Precision Photographic Systems Repair/Aerospace Photographic Systems Repair career ladders, AFSCs 40430, 40450, 40470, 40431, 40451, 40471, and 40491, conducted by the Occupational Survey Branch, USAF Occupational Measurement Center, from February 1976 through October 1976.

The report describes: (1) development and administration of the survey instrument; (2) summaries of tasks performed by airmen grouped by skill level, experience level, and similarity of tasks performed; (3) comparisons with current training and career field structure documents; and (4) recommended actions for further study.

INVENTORY DEVELOPMENT AND ADMINISTRATION

The data collection instrument for the occupational survey was USAF Job Inventory AFPT 90-404-206. The inventory booklet was composed of two parts: a background information section in which job incumbents provided information about themselves; and a duty-task list section which assessed the relative amount of time spent on tasks performed in the incumbents' present job. The latter section consisted of 1,033 tasks grouped under 18 headings. Thorough research of publications and directives, personal interviews with seven subject-matter specialists at one base and written reviews from 88 experienced precision and aerospace photographic systems repair technicians contributed to the development of the survey instrument.

Consolidated base personnel offices in operational units worldwide received the inventory booklets for administration to 585 job incumbents holding the DAFSCs identified above. Survey administration occurred during February 1976 through May 1976, based upon the February 1976 Uniform Airman Record. After supplying identification and biographical information, incumbents checked and rated the tasks performed in their current job. Tasks were rated on a 9-point scale showing relative time spent on each task compared to all other tasks performed in the current job. The ratings ranged from 1 (very-small-amount time spent) through 5 (about-average time spent) to 9 (very-large-amount time spent). Respondents did not rate tasks not performed in their current job.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

Table 1 reflects the percentage distribution, by major command, of assigned personnel in both career ladders as of February 1976. Also reflected is the distribution by major command of incumbents making up the total sample. The number of incumbents in the total sample represents 72 percent of the career field members surveyed, and is considered to be an adequate sample of the Precision Photographic Systems Repair/Aerospace Photographic Systems Repair career ladder population.

In the development of the survey instrument, every effort was made to include all duties and tasks important to the accuracy and completeness of the survey. However, due to the possibility of omitting one or more important duties or tasks, instructions for completing the inventory urged respondents to write in any duties or tasks not listed. In this survey, two write-in comments were significant. Approximately fifteen respondents noted that copying cameras were omitted from the background section. An additional six respondents indicated that corrosion control tasks should have been included for all pieces of equipment rather than printer system easels (K595), relocatable facilities (P987), and test equipment (R1014) only. It is felt that the inclusion of these tasks in the current job inventory would have impacted very little on the survey results. However, these tasks should be considered for inclusion in future surveys of the 404X0/404X1 career ladders.

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	404X0		404X1		40491	
	PERCENT OF ASSIGNED	PERCENT OF SAMPLE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
TAC	30	30	26	27	15	14
MAC	20	20	0	0	15	14
SAC	15	19	30	30	32	44
USAFE	13	10	12	15	15	14
ATC	8	7	4	2	0	0
AFSC	5	6	5	5	0	0
PACAF	5	5	7	6	0	0
ADC	1	2	13	13	23	14
AFLC	1	1	0	0	0	0
AAC	0	0	1	2	0	0
OTHER	2	0	2	0	0	0
TOTAL	100	100	100	100	100	100

SUMMARY OF BACKGROUND INFORMATION

Assignment To Career Ladder

Table 2 reflects the method by which survey respondents were assigned to the 404X0 and 404X1 career ladders. Seventy percent of the 404X0 respondents and 71 percent of the 404X1 respondents were assigned after completion of resident technical training. Retraining from another specialty was the second most frequent method, with 19 percent of the 404X0 incumbents and 15 percent of the 404X1 incumbents entering the career field in this manner.

Relative Job Satisfaction

As shown in Table 3, 71 percent of the 404X0 incumbents found their job fairly interesting to extremely interesting. This figure is almost identical to the job interest response of personnel in 35 other career ladders surveyed in 1975. On the other hand, the 404X1 respondents indicated a much lower degree of job satisfaction, with only 52 percent of these members finding their job fairly interesting to extremely interesting.

Job interest across AFMS groups for the 404X0 and 404X1 ladders, as shown in Table 4, revealed a sharp increase in job interest for 404X0 personnel between the first and second enlistment periods, after which it remained fairly constant through the fifth enlistment period. Job interest across the 404X1 enlistment groups, on the other hand, reflected a fairly constant level of interest across the first three enlistment groups, with a jump in interest during the fourth enlistment.

Perceived Utilization of Talents and Training

Survey respondents were also asked to rate both their perceptions of how their present job utilized their talents and their training. As shown in Table 5, a higher percentage of 404X0 incumbents, in comparison to 404X1 incumbents, felt their talents and training were being well utilized. In addition, the small number of 40491 superintendents all felt their talents and training were being well utilized on the job.

Reenlistment Intentions Compared to Actual Reenlistment Rates

Another background question asked survey respondents whether or not they intended to reenlist. Among the 404X0 respondents, only 28 percent of the first-term members intended to reenlist as compared to 78 percent and 79 percent for the second-term and career respondents respectively (see Table 6). Actual reenlistment rates for fiscal year 75 (See Table 7) revealed that 46 percent of the eligible 404X0 first-term airmen did indeed reenlist, while 79 percent and 90 percent of

second-term and career airmen, respectively, reenlisted. The reenlistment intentions of the first-term 404X1 respondents more closely matched the actual reenlistment figures for fiscal year 75, with 43 percent intending to reenlist and 59 percent of the eligibles actually doing so. Similarly, the second-term and career 404X1 respondents indicated lower reenlistment intentions than the actual reenlistment rates revealed, with 53 percent and 79 percent, respectively, intending to reenlist, whereas 57 percent of the second-termers and 93 percent of the career ladder eligibles actually reenlisted.

TABLE 2
METHOD OF ASSIGNMENT TO CAREER LADDER
(PERCENT MEMBERS RESPONDING)

	TOTAL 404X0 (N=283)	DAFSC 40430 (N=14)	DAFSC 40450 (N=201)	DAFSC 40470 (N=58)	TOTAL 404X1 (N=136)	DAFSC 40431 (N=10)	DAFSC 40451 (N=76)	DAFSC 40471 (N=50)	DAFSC 40491 (N=7)
COMPLETED RESIDENT TECHNICAL TRAINING	70	64	72	60	71	90	75	62	72
RECLASSIFIED WITHOUT COMPLETING TECHNICAL TRAINING OR OJT	0	0	0	0	0	0	0	0	0
DIRECT DUTY ASSIGNMENT (DDA) FROM BASIC TRAINING TO OJT WITHOUT BYPASS TEST	1	0	2	0	0	0	0	0	14
DDA FROM BASIC TRAINING WITH BYPASS TEST	1	7	0	0	2	0	1	2	0
CONVERTED FROM ANOTHER AF SPECIALTY WITHOUT TRAINING BY CLASSIFICATION BOARD ACTION	3	0	2	9	3	0	1	6	0
RETRAINED FROM ANOTHER SPECIALTY	19	21	21	22	15	10	16	16	0
REENLISTED AFTER PRIOR SERVICE IN USAF, OR FROM ANOTHER BRANCH OR SERVICE	3	0	2	5	5	0	5	6	14
NOT REPORTED	3	8	1	4	4	0	2	8	0

TABLE 3
JOB INTEREST BY DAFSC GROUPS
(PERCENT MEMBERS RESPONDING)

I FIND MY JOB:	TOTAL 404X0 (N=283)	DAFSC 40430 (N=14)	DAFSC 40450 (N=201)	DAFSC 40470 (N=58)	TOTAL 404X1 (N=136)	DAFSC 40431 (N=10)	DAFSC 40451 (N=76)	DAFSC 40471 (N=50)	DAFSC 40491 (N=7)	OTHER AF SPECIALTIES* (N=21, 107)
FAIRLY INTERESTING TO EXTREMELY INTERESTING	71	50	69	83	52	80	45	58	100	69
SO-SO	13	21	14	5	31	10	16	18	0	15
FAIRLY DULL TO EXTREMELY DULL	16	29	17	10	16	10	38	24	0	16
NOT REPORTED	0	0	0	2	1	0	1	0	0	0

* Based on surveys of 35 career ladders collected in 1975.

TABLE 4

JOB INTEREST OF 404X0/X1 INCUMBENTS GROUPED BY AFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1ST JOB (10-34 MONTHS) (N=77)	404X0 ENLISTMENT GROUPS					
		1ST ENLIST (N=122)	2ND ENLIST (N=55)	3RD ENLIST (N=38)	4TH ENLIST (N=22)	5TH ENLIST (N=18)	6TH ENLIST (N=18)
I FIND MY JOB:							
FAIRLY INTERESTING TO EXTREMELY INTERESTING	60	59	82	76	72	72	100
SO-SO	17	17	7	13	23	6	0
FAIRLY DULL TO EXTREMELY DULL	23	24	11	7	5	22	0
NOT REPORTED	0	0	0	4	0	0	0

	1ST JOB (9-33 MONTHS) (N=38)	404X1 ENLISTMENT GROUPS					
		1ST ENLIST (N=47)	2ND ENLIST (N=30)	3RD ENLIST (N=31)	4TH ENLIST (N=11)	5TH ENLIST (N=11)	6TH ENLIST (N=13)
I FIND MY JOB:							
FAIRLY INTERESTING TO EXTREMELY INTERESTING	53	49	50	42	82	55	92
SO-SO	26	23	10	26	0	0	0
FAIRLY DULL TO EXTREMELY DULL	21	28	37	32	18	45	8
NOT REPORTED	0	0	3	0	0	0	0

TABLE 5
PERCEIVED UTILIZATION OF TALENTS AND TRAINING BY DAFSC GROUPS
(PERCENT MEMBERS RESPONDING)

	DAFSC 404X0 (N=283)	DAFSC 404X1 (N=136)	DAFSC 40491 (N=7)
MY JOB UTILIZES MY TALENTS:			
FAIRLY WELL TO PERFECTLY	72	49	100
VERY LITTLE OR NOT AT ALL	28	49	0
NOT REPORTED	0	2	0
MY JOB UTILIZES MY TRAINING:			
FAIRLY WELL TO PERFECTLY	64	46	100
VERY LITTLE OR NOT AT ALL	36	54	0
NOT REPORTED	0	0	0

TABLE 6

REENLISTMENT INTENTIONS OF THE 404X0/X1 SURVEY SAMPLE
(PERCENT RESPONDING)

	404X0		404X1	
	1ST TERM (N=122)	2ND TERM (N=55)	1ST TERM (N=47)	2ND TERM (N=30)
NO OR PROBABLY NO	71	20	55	43
YES OR PROBABLY YES	28	78	43	53
NOT REPORTED	1	2	2	4
				CAREER (N=66)
				18
				79
				3

TABLE 7

ACTUAL REENLISTMENTS FOR 404X0/X1 PERSONNEL
(JUL 75 - JUN 76)

	404X0		404X1	
	1ST TERM	2ND TERM	1ST TERM	2ND TERM
ELIGIBLE TO REENLIST	41	19	17	14
REENLISTED	19	15	10	8
REENLISTMENT RATE	46%	79%	59%	57%
				CAREER
				28
				26
				93%

CAREER LADDER STRUCTURE

The job structure of the Precision and Aerospace Photo Systems Repair career ladders was determined on the basis of similarity of the tasks performed by incumbents in the field, independent of DAFSC or other background factors. The computer products used in this part of the analysis helped identify: (1) tasks which are common to a group of incumbents; (2) the breadth or narrowness of the jobs performed in the field; and (3) tasks and background characteristics which tend to distinguish between the different jobs within the career field.

Based on task similarity, the best division among the jobs performed by the 416 incumbents included in the structural analysis is illustrated in Figure 1. Three divisions found in the structure diagram are (1) 404X1 job groups; (2) 404X0/404X1 job groups; and (3) 404X0 groups. These groups are identified as follows:

404X1 Job Groups

- Bomber Aircraft Radar Recording Camera System Mechanics
- Fighter Aircraft Radar Recording Camera System Mechanics
- Fighter Aircraft Gun Camera Mechanics
- Fighter Aircraft Strike Camera System Mechanics
- Fighter Aircraft Motion Picture Mechanics
- F-106 WSEM Tape Processing Technicians

404X0/404X1 Job Groups

- Curriculum Specialists
- Supervisory Personnel

404X0 Job Groups

- Printer Equipment Maintenance Personnel
- Apprentice Recon Photo Lab Repairmen
- Stationary Recon Processor/Processor Support Installation Specialists
- Processor Installation Specialists
- Base Photo Lab Personnel
- Motion Picture Camera Shop Maintenance Personnel
- Audiovisual Equipment Technicians

A summary of representative tasks and background information for each group can be found in Appendix A. The GRP numbers used in conjunction with each group in Appendix A and in parts of the narrative are references to computer printout information included for use by classification and training officials.

FIGURE 1



DISCUSSION OF 404X1 JOB GROUPS

Bomber Aircraft Radar Recording Camera System Mechanics. The 45 members of this group are primarily SAC personnel assigned within the CONUS. Approximately 49 percent of their time is spent performing tasks related to the shop maintenance of radar recording cameras, such as the KS-32 and O-15, used primarily on the B-52 bomber aircraft. An additional 19 percent of their time is spent performing flightline installation and maintenance tasks on these two cameras.

Within this group, there were three distinct jobs identified: NCOICs (GRP243), shop mechanics (GRP191), and flightline mechanics (GRP101). The NCOIC group was the only one in which a significant percentage of members (53 percent) performed tasks related to bombspotting cameras.

Fighter Aircraft Radar Recording Camera System Mechanics (GRP068). The 18 members of this group primarily install and maintain radar recording cameras, such as the KD-42 and KS-97, used on fighter aircraft. Forty-seven percent of their time is spent on shop maintenance tasks, 21 percent on flightline maintenance tasks, and 15 percent working with forms and records. Five percent of their time is spent operating test equipment.

Fighter Aircraft Gun Camera Mechanics (GRP172). These five incumbents work on gun cameras, such as the KB-25, KS-27, and N-9, used mainly on fighter aircraft. Fifty-nine percent of their time is devoted to shop maintenance tasks, 26 percent to flightline maintenance tasks, and six percent to completion of forms and records. While tasks pertaining to the maintenance of gun cameras were predominant, incumbents also indicated that other types of cameras were being maintained.

Fighter Aircraft Strike Camera System Mechanics. The 14 members of this group primarily install and maintain the KB-18 strike cameras used on fighter and attack/observation aircraft. Six of the members are assigned within the CONUS (GRP129) and maintain only the KB-18 camera. The majority of their time is spent on shop maintenance (41 percent), flightline maintenance (30 percent), and forms completion (13 percent), with only 12 percent spent on supervisory duties A through D.

A second group of eight members are assigned overseas (GRP230). Most of these members hold a 7-skill level DAFSC. They maintain not only the KB-18 camera, but also perform maintenance on at least four other types of aerial cameras and use a wide variety of test equipment. In addition to time spent on shop and flightline maintenance and forms completion (43 percent, 20 percent, and 11 percent respectively), they spend 22 percent of their time on supervisory duties A through D.

Fighter Aircraft Motion Picture Mechanics (GRP045). The five members of this group install and maintain the DBM-4 and DBM-5 motion picture cameras used on fighter aircraft. Fifty-five percent of their time is spent performing shop maintenance tasks, 13 percent performing flightline maintenance tasks, and 13 percent filling out forms and maintenance records. This group, like the gun camera mechanics, tended to be made up of lower grade airmen.

F-106 WSEM Tape Processing Technicians (GRP107). The 17 members of this group are all assigned to ADC F-106 squadrons within the CONUS. In addition to installing and performing perform maintenance on the 917-FA radar recording camera, they also process the WSEM tapes and maintain their own processing equipment. A striking contrast with the other 404X1 groups is found in their distribution of time spent. Although 30 percent of their time is spend on shop camera maintenance tasks, 13 percent is spent on processing WSEM tapes, 13 percent on maintaining the processing equipment, and only 10 percent on flightline camera maintenance.

DISCUSSION OF 404X0/404X1 JOB GROUPS

Curriculum Specialists (GRP152). This is the smallest group identified in the 404X0/X1 career ladders, consisting of three senior NCOs assigned to the ATC technical training center at Lowry AFB. They perform an average of only eleven tasks, while concentrating 90 percent of their time on training tasks.

Supervisory Personnel. This 45-member group is composed primarily of senior NCOs holding DAFSCs 40470, 40471, or 40491. They spend an average of 65 percent of their time performing tasks within supervisory duties A through D.

Two types of supervisory personnel were identified. These were Firstline Supervisors (GRP062) and Maintenance Supervisors (GRP065). The Firstline Supervisors perform over twice as many tasks as the Maintenance Supervisors, devoting 61 percent of their time to technical tasks rather than supervisory tasks. Seventy percent of these supervisors are assigned either to recon photo labs or mobile facilities.

The Maintenance Supervisors, by contrast, perform half as many tasks, eighty-five percent of which were related to supervisory duties. Most of these members are assigned to avionics maintenance sites or recon photo labs or mobile facilities.

DISCUSSION OF 404X0 JOB GROUPS

Printer Equipment Maintenance Personnel. This group, consisting of 96 members, is the largest group within the 404X0 career ladder. Almost all of the personnel are assigned to reconnaissance work areas, with 47 percent being stationed in recon photo labs and 35 percent in mobile facilities. The distinguishing characteristic of this group is the large percentage of time spent performing printer systems maintenance tasks. The average member spends 17 percent of his time on printer maintenance. As with most of the other 404X0 groups, a large percentage of time is also spent on processing equipment installation and maintenance (25 percent) and processor support equipment installation and maintenance (26 percent).

Four distinct jobs were identified within this large group. These are recon color printer equipment maintenance (GRP126), mobility lab printer equipment maintenance (GRP180), processor drive systems maintenance (GRP174), and recon technical printer equipment maintenance (GRP145).

Apprentice Recon Photo Lab Repairmen (GRP083). This five-member group is composed of lower grade airmen assigned to SAC recon photo labs within CONUS. Their duties are very limited, consisting only of maintaining light tables and filling out maintenance request forms, maintenance records, and item processing tags. The average number of tasks performed was 27.

Stationary Recon Processor/Processor Support Installation Specialists (GRP067). All eight members of this group hold DAFSC 40450. Seventy-five percent are assigned to recon photo lab sites within the CONUS, with two-thirds of these labs being stationary rather than mobile. The majority of the incumbents' duty time is divided between installing and maintaining processor equipment (31 percent) and processor support equipment (37 percent). Approximately 40 percent of the members of this group maintain some type of ground still camera.

Processor Installation Specialists. The 22 members of this group spend an average of 46 percent of their time installing processor systems, and perform a limited number of tasks. Another distinguishing characteristic of the group is the large amount of time spent operating and maintaining shop equipment (12 percent).

Within this group, there are two quite distinct job groups: mobility lab processor installation specialists (GRP053) and motion picture lab processor installation specialists (GRP102). The five mobility lab specialists are assigned to TAC and perform an average of only 59 tasks. They spend 29 percent of their time performing common processor installation tasks, and 21 percent performing unique mobility installation tasks. The motion picture lab specialists are assigned

primarily to MAC. Members of this group spend 55 percent of their time performing processor installation tasks, many of which are unique to motion picture labs. The average number of tasks performed is 80.

Base Photo Lab Personnel. These 51 members make up the second largest group within the 404X0 career ladder. These individuals are primarily 40450 DAFSC personnel maintaining ground camera systems within base photo labs. Besides the wide variety of ground camera systems they maintain, perhaps the most distinguishing characteristics are the wide variety of duties and the large number of tasks they perform.

Motion Picture Camera Shop Maintenance Personnel (GRP104). The nine members of this group are primarily 40450 DAFSC personnel who spend 65 percent of their time maintaining the DBM-4 and DBM-5 motion picture cameras. An additional 11 percent of their time is spent performing tasks classified as general shop maintenance of aircraft camera systems.

Audiovisual Equipment Technicians (GRP061). This small five-member group is composed of 5- and 7-skill level DAFSC personnel within CONUS who spend 67 percent of their time maintaining audiovisual equipment, and seven percent completing related forms and reports. The average number of tasks performed is quite small, only 49. Two members work in film libraries, one in base photo maintenance, and two in "other" work areas.

COMPARISON OF AFM 39-1 WITH SURVEY RESULTS

A comparison of each of the AFM 39-1 job descriptions with the survey data revealed the descriptions to be generally accurate. However, a few duties were omitted which are noteworthy due to the high percentage of incumbents performing them in each of the respective DAFSC groups.

The job descriptions for both the 40430/50 and 40470 AFSCs failed to mention the maintenance of audiovisual equipment. Survey data indicated that 21 percent, 41 percent, and 29 percent of the 3-, 5-, and 7-skill level 404X0 respondents, respectively, performed tasks related to audiovisual equipment. In addition, tasks related to the transportation and physical installation of relocatable facilities are also not included in the AFM 39-1 job description. Forty-three percent, 37 percent, and 26 percent of the 3-, 5-, and 7-skill level 404X0 sample, respectively, performed tasks related to these mobile facilities. The 40470 job description also omitted the responsibilities of completing and reviewing maintenance forms and annotating maintenance records. Survey data revealed that 95 percent of the 40470 respondents performed these duties, and that the overall time spent on these duties by all 40470 respondents was 12 percent. In addition, the 40470 job description failed to include the use and maintenance of shop equipment. According to the survey data, 60 percent of the 7-skill level incumbents surveyed operated or maintained shop equipment.

Job descriptions for the 40431/51 and 40471 AFSCs did not include coordination with the intelligence units, aircrew members, or other maintenance sections regarding maintenance and modification of aircraft components. According to survey responses, an average of 42 percent, 34 percent, and 53 percent of the 3-, 5-, and 7-skill level incumbents, respectively, engaged in five such coordinating activities. Neither did the 40431/51 job description include the operation and maintenance of Weapon System Evaluation Missile (WSEM) Tapes. The survey data reveal that 30 percent of the 3-skill level respondents performed 11 WSEM processor-related tasks. These tasks were also performed by 5- and 7-skill level personnel, but the percentages of personnel performing were much lower. As with the 40470 job description, the 40471 description made no mention of completion and review of maintenance forms or annotation of maintenance records. Yet survey results show that 98 percent of the 40471 respondents performed these duties. The 40471 job description also does not include the uploading/downloading and delivery of film. Survey data shows 60 percent to 72 percent of the 7-level respondents performed related tasks.

ANALYSIS OF DAFSC GROUPS

Table 8 shows the differences in relative amount of time spent on tasks within the duty headings used to structure the inventory task list. A comparison of the tasks performed by members of the 404X0 and 404X1 career ladders reveals an almost complete dichotomy of technical duty areas. The 404X0 incumbents install and maintain processor systems, and maintain ground camera systems and mobility installations (duties I through P), while the 404X1 incumbents perform shop and flightline maintenance of aircraft camera systems and process aircraft film (duties F through H). Members of the 404X1 ladder spend a slightly higher percentage of their time working with forms, records, and reports than do 404X0 members (13 percent and 9 percent respectively). However, this should not be interpreted to mean they perform a greater number of paperwork tasks, only that they spend more of their time in this area. The 404X1 personnel also perform fewer tasks overall than do their 404X0 counterparts, with less variation in the number of tasks performed by individual members.

Comparisons across skill levels within each of the ladders were also made. The following trends were noticeable across both ladders. Approximately two-thirds of the 7-skill level personnel supervise subordinates as compared to one-fifth of the 5-skill level personnel. Seven-skill level incumbents also spend a considerably larger percentage of their time performing supervisory duties A through D, and less time on technical duties. Tasks which most clearly differentiate the performance of 5- and 7-skill level personnel were supervisory in nature (see Tables 9 and 10).

However, there was less distinction between the 5- and 7-skill levels in the 404X1 career ladder in terms of percent time spent in technical versus supervisory duties. The 40471 personnel also had considerably less experience than the 40470 personnel, both in the career field and in military service. They were supervising technicians who continued to perform technical duties while supervising a small number of subordinates, thus performing a larger number of tasks than their 5-skill level counterparts. The 40470 personnel, on the other hand, supervised an average of twice as many subordinates and performed fewer tasks than the 40450 personnel.

Although the seven 40491 survey respondents comprise only 50 percent of the total 40491 manning, a comparison was made among 40491, 40471, and 40470 incumbents. The bulk of the 40491 superintendents' time (66 percent) was spent on supervisory duties A through D. An additional 10 percent was spent working with forms, records, and reports. However, 20 percent of their time was spent in 404X0 technical duty areas I through P, while none was spent in 404X1 technical duty areas F through H. Tables 11 and 12 give the thirteen tasks which most clearly differentiate 40491 personnel from the 40470 and 40471 personnel respectively. The presence of eight technical tasks in Table 12 further illustrates the lack of technical similarity between the 40491 and 40471 DAFSCs.

TABLE 8
PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

<u>SUPERVISORY DUTIES</u>									
	<u>TOTAL</u> <u>404X0</u>	<u>DAFSC</u> <u>40430</u>	<u>DAFSC</u> <u>40450</u>	<u>DAFSC</u> <u>40470</u>	<u>TOTAL</u> <u>404X1</u>	<u>DAFSC</u> <u>40431</u>	<u>DAFSC</u> <u>40451</u>	<u>DAFSC</u> <u>40471</u>	<u>DAFSC</u> <u>40491</u>
A ORGANIZING AND PLANNING	2	1	1	7	3	1	2	5	16
B DIRECTING AND IMPLEMENTING	5	2	3	13	8	4	5	14	22
C INSPECTING AND EVALUATING	4	2	1	14	5	3	2	8	21
D TRAINING	3	0	1	8	3	1	1	5	7
TOTAL	14	5	6	42	19	9	10	32	66
<u>DUTIES INVOLVING MAINTENANCE FORMS AND RECORDS</u>									
E WORKING WITH FORMS, RECORDS, AND REPORTS	9	10	8	12	13	10	14	14	10
TOTAL	9	10	8	12	13	10	14	14	10
<u>404X1 TECHNICAL DUTIES</u>									
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	1	0	1	1	17	13	21	14	0
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	2	0	2	1	39	49	44	31	0
H PROCESSING AIRCRAFT CAMERA FILM AND WEAPON SYSTEM EVALUATION MISSILE (WSEM) TAPES	0	1	1	0	2	3	2	2	0
TOTAL	3	1	4	2	58	65	67	47	0

TABLE 8 (CONT'D)
PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

404X0 TECHNICAL DUTIES		TOTAL 404X0	DAFSC 40430	DAFSC 40450	DAFSC 40470	TOTAL 404X1	DAFSC 40431	DAFSC 40451	DAFSC 40471	DAFSC 40491
I	INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	17	20	20	8	2	6	1	2	6
J	INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	19	27	20	12	1	2	1	0	8
K	MAINTAINING PRINTER SYSTEMS	10	13	11	7	0	0	0	1	5
L	MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	6	5	7	4	0	0	0	0	0
M	MAINTAINING GROUND MOTION PICTURE CAMERAS	4	5	5	1	1	0	1	1	0
N	MAINTAINING CAMERA ASSOCIATED EQUIPMENT	3	2	3	2	1	1	1	0	0
O	MAINTAINING AUDIOVISUAL EQUIPMENT	5	1	5	4	1	1	1	0	0
P	MAINTAINING MOBILITY LABS	3	3	3	1	0	0	0	0	1
TOTAL		67	76	74	39	6	10	5	4	20
DUTIES INVOLVING OPERATION AND MAINTENANCE OF EQUIPMENT										
Q	OPERATING AND MAINTAINING SHOP EQUIPMENT	5	6	6	3	1	2	1	1	3
R	OPERATING TEST EQUIPMENT	2	2	2	2	3	4	3	2	1
TOTAL		7	8	8	5	4	6	4	3	4

TABLE 9

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 5- AND 7-SKILL LEVEL 404X0 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 40450	DAFSC 40470	DIFFERENCE
B33 DRAFT CORRESPONDENCE	11	69	-58
B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	17	71	-54
B40 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	10	62	-52
C70 PREPARE OR REVIEW QUALITY CONTROL INSPECTION SUMMARY FORMS (AF FORM 2420)	6	57	-51
B50 SUPERVISE PRECISION PHOTOGRAPHIC SYSTEMS REPAIRMEN (AFSC 40450)	19	67	-48
B23 CONDUCT OR PARTICIPATE IN STAFF MEETINGS	11	59	-48
C57 EVALUATE CORROSION CONTROL PROGRAMS	20	67	-47
C71 PREPARE OR REVIEW ROUTING AND REVIEW OF QUALITY CONTROL REPORTS FORMS (AF FORM 2419)	4	50	-46
C59 EVALUATE INSPECTION REPORTS OR PROCEDURES	10	55	-45
A3 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	4	48	-44
C62 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	12	55	-43
D84 COUNSEL TRAINEES ON TRAINING PROGRESS	11	54	-43
B25 COORDINATE WITH OTHER SECTIONS ON MAINTENANCE OR REPAIR OF EQUIPMENT OR COMPONENTS	30	72	-42
D91 EVALUATE OJT TRAINEES	11	53	-42

TABLE 10

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 5- AND 7-SKILL LEVEL 404X1 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 40451	DAFSC 40471	DIFFERENCE
B40 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	14	68	-54
B33 DRAFT CORRESPONDENCE	17	64	-47
B26 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	26	70	-44
D87 DETERMINE TRAINING REQUIREMENTS	13	54	-41
B44 SUPERVISE AEROSPACE PHOTOGRAPHIC SYSTEMS REPAIRMEN (AFSC 41451)	16	56	-40
A5 DETERMINE WORK PRIORITIES	32	70	-38
C72 REVIEW MAINTENANCE DATA COLLECTION RECORDS	38	76	-38
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	18	56	-38
A19 SCHEDULE LEAVES OR PASSES	17	54	-37
B23 CONDUCT OR PARTICIPATE IN STAFF MEETINGS	13	50	-37
A17 REVIEW TABLE OF ALLOWANCES	12	46	-34
D91 EVALUATE OJT TRAINEES	11	44	-33
D85 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	21	54	-33
D84 COUNSEL TRAINEES ON TRAINING PROGRESS	12	44	-32

TABLE 11

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 40470 AND 40491 PERSONNEL
(PERCENT MEMBERS PERFORMING)

<u>TASK</u>	<u>DAFSC 40470</u>	<u>DAFSC 40491</u>	<u>DIFFERENCE</u>
A1 ACT AS TRAINING ADVISOR AT STAFF LEVEL	14	100	-86
C55 EVALUATE BUDGETING OR FINANCIAL REQUIREMENTS	12	86	-74
A17 REVIEW TABLE OF ALLOWANCES	31	100	-69
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	31	100	-69
A21 SERVE ON JOB EVALUATION BOARDS	7	72	-65
A13 PLAN SAFETY PROGRAMS	22	85	-63
C61 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	29	85	-56
E126 REVIEW CUSTODIAN ACCOUNT AND RECEIPT LISTINGS (CACRL)	29	85	-56
A8 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (01) OR STANDING OPERATING PROCEDURES (SOP)	45	100	-55
C64 EVALUATE SAFETY OR SECURITY PROGRAMS	17	71	-54
A7 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	19	71	-52
B36 IMPLEMENT COST REDUCTION PROGRAMS	19	71	-52
B39 IMPLEMENT SUGGESTION PROGRAMS	19	71	-52

TABLE 12

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 40471 AND 40491 PERSONNEL
(PERCENT MEMBERS PERFORMING)

<u>TASK</u>	<u>DAFSC 40471</u>	<u>DAFSC 40491</u>	<u>DIFFERENCE</u>
A1 ACT AS TRAINING ADVISOR AT STAFF LEVEL	8	100	-92
C76 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	14	100	-86
C61 EVALUATE MAINTENANCE MANAGEMENT OF SUBORDINATE OFFICES OR UNITS	-	86	-86
C75 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	14	86	-72
A21 SERVE ON JOB EVALUATION BOARDS	-	71	-71
F146 PERFORM OPERATIONAL CHECKS OF AIRCRAFT CAMERA SYSTEMS	82	-	82
G213 CLEAN OR LUBRICATE FILM MAGAZINES	78	-	78
G278 VISUALLY INSPECT FILM MAGAZINES	78	-	78
G219 OPERATIONALLY CHECK AIRCRAFT CAMERA SYSTEMS	74	-	74
G221 PERFORM OPERATIONAL CHECKS OF FILM MAGAZINES	74	-	74
F137 COORDINATE WITH CREW CHIEFS OR OTHER PERSONNEL ON ACCESSIBILITY OF AIRCRAFT	72	-	72
F173 UPLOAD OR DOWNLOAD FILM IN MAGAZINES	72	-	72
G204 BENCH CHECK FILM MAGAZINES	72	-	72

ANALYSIS OF AFMS GROUPS

As a comparison to trends noted in the tasks performed with DAFSC upgrading, an analysis was made of job differences by experience level for both the 404X0 and 404X1 ladders. Conclusions similar to those for DAFSC groups were noted.

Tables 13 and 14 present the relative amount of time spent across duties by first job groups and enlistment groups for both ladders. Within each ladder, time spent on supervisory duties increased with experience, while time spent on technical duties decreased. The percent time spent using or maintaining shop or test equipment varied very little among the enlistment groups, although it should be pointed out that 404X0 personnel were the primary users of shop equipment.

Tables 15 and 16 list representative tasks performed by a high percentage of 404X0 and 404X1 first assignment personnel respectively. Over 50 percent of the representative tasks performed by the 404X0 members involved the installation of processors, while 25 percent of the 404X1 tasks were directly related to radar recording camera system maintenance.

Several contrasting trends between the two ladders parallel findings reported in the DAFSC section of this report. Percent time spent on forms and reports remained relatively high and stable across all 404X1 career ladder enlistment groups, while starting out low in the second enlistment group of the 404X0 career ladder and gradually increasing across groups until it matched the 404X1 percentage at the fifth enlistment.

A comparison of percent members performing individual tasks for each enlistment group across both ladders revealed that the 404X1 incumbents tended to pick up supervisory tasks one enlistment group earlier than their 404X0 counterparts. The biggest increase in percent members performing supervisory tasks occurred in the third enlistment for 404X1 personnel and the fourth enlistment for 404X0 personnel. For the 404X0 incumbents, there was a subsequent sharp decrease in the number of technical tasks performed during the fifth enlistment. There was no such decrease in the 404X1 fourth or fifth enlistment groups.

TABLE 13

PERCENT TIME SPENT ON DUTIES BY THE 404X0 INCUMBENTS ACROSS AFMS GROUPS

	1ST JOB (10-34 MOS)	ENLISTMENT GROUPS					
		1ST	2ND	3RD	4TH	5TH	6TH
<u>SUPERVISORY DUTIES</u>							
A ORGANIZING AND PLANNING	0	0	1	2	6	6	9
B DIRECTING AND IMPLEMENTING	1	2	4	6	10	10	19
C INSPECTING AND EVALUATING	1	1	2	6	6	10	19
D TRAINING	0	0	1	3	5	15	7
TOTAL	2	3	8	17	27	41	54
<u>DUTIES INVOLVING MAINTENANCE FORMS AND RECORDS</u>							
E WORKING WITH FORMS, RECORDS, AND REPORTS	6	7	9	8	12	14	16
TOTAL	6	7	9	8	12	14	16
<u>404X1 TECHNICAL DUTIES</u>							
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	0	1	1	1	0	1	1
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	1	2	2	1	0	1	1
H PROCESSING AIRCRAFT CAMERA FILM AND WEAPON SYSTEM EVALUATION MISSILE (WSEM) TAPES	1	1	1	0	0	0	0
TOTAL	2	4	4	2	0	2	2

TABLE 13 (CONT'D)
PERCENT TIME SPENT ON DUTIES BY THE 404X0 INCUMBENTS ACROSS AFMS GROUPS

	1ST JOB (10-34 MOS)	ENLISTMENT GROUPS					
		1ST	2ND	3RD	4TH	5TH	6TH
<u>404X0 TECHNICAL DUTIES</u>							
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	23	21	19	15	13	10	6
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	19	21	21	21	16	10	9
K MAINTAINING PRINTER SYSTEMS	11	11	10	12	11	8	5
L MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	7	6	7	8	5	2	2
M MAINTAINING GROUND MOTION PICTURE CAMERAS	8	6	4	3	1	2	0
N MAINTAINING CAMERA ASSOCIATED EQUIPMENT	4	4	3	3	2	1	1
O MAINTAINING AUDIOVISUAL EQUIPMENT	6	6	5	2	6	3	1
P MAINTAINING MOBILITY LABS	3	3	3	2	1	1	1
TOTAL	81	78	72	66	55	37	25
<u>DUTIES INVOLVING OPERATION AND MAINTENANCE OF EQUIPMENT</u>							
Q OPERATING AND MAINTAINING SHOP EQUIPMENT	7	6	5	5	4	4	2
R OPERATING TEST EQUIPMENT	2	2	2	2	2	2	1
TOTAL	9	8	7	7	6	6	3

TABLE 14

PERCENT TIME SPENT ON DUTIES BY THE 404X1 INCUMBENTS ACROSS AFMS GROUPS

	1ST JOB (9-33 MOS)	ENLISTMENT GROUPS					
		1ST	2ND	3RD	4TH	5TH	6TH
<u>SUPERVISORY DUTIES</u>							
A ORGANIZING AND PLANNING	1	1	2	5	5	5	11
B DIRECTING AND IMPLEMENTING	3	3	6	14	13	15	19
C INSPECTING AND EVALUATING	1	1	3	7	8	11	15
D TRAINING	0	0	2	3	9	5	6
TOTAL	5	5	13	29	35	36	51
<u>DUTIES INVOLVING MAINTENANCE FORMS AND RECORDS</u>							
E WORKING WITH FORMS, RECORDS, AND REPORTS	9	10	15	16	12	15	13
TOTAL	9	10	15	16	12	15	13
<u>404X1 TECHNICAL DUTIES</u>							
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	21	21	17	18	10	12	7
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	47	47	46	32	28	24	16
H PROCESSING AIRCRAFT CAMERA FILM AND WEAPON SYSTEM EVALUATION MISSILE (WSEM) TAPES	3	2	1	1	1	3	2
TOTAL	71	70	64	51	39	39	25

TABLE 14 (CONT'D)
PERCENT TIME SPENT ON DUTIES BY THE 404X1 INCUMBENTS ACROSS AFMS GROUPS

404X0 TECHNICAL DUTIES	1ST JOB (9-33 MOS)	ENLISTMENT GROUPS					
		1ST	2ND	3RD	4TH	5TH	6TH
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	3	3	1	1	3	3	4
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	1	1	0	0	2	2	3
K MAINTAINING PRINTER SYSTEMS	0	0	0	0	5	1	2
L MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	0	0	0	0	0	0	0
M MAINTAINING GROUND MOTION PICTURE CAMERAS	2	2	1	0	0	0	0
N MAINTAINING CAMERA ASSOCIATED EQUIPMENT	2	2	0	0	0	1	0
O MAINTAINING AUDIOVISUAL EQUIPMENT	2	2	1	0	0	0	0
P MAINTAINING MOBILITY LABS	0	0	0	0	0	0	0
TOTAL	10	10	3	1	10	7	9
DUTIES INVOLVING OPERATION AND MAINTENANCE OF EQUIPMENT							
Q OPERATING AND MAINTAINING SHOP EQUIPMENT	2	2	1	1	2	1	1
R OPERATING TEST EQUIPMENT	3	3	2	2	2	2	1
TOTAL	5	5	3	3	4	3	2

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY 65 PERCENT OR MORE 404X0 PERSONNEL
IN THEIR FIRST ASSIGNMENT

TASK	PERCENT MEMBERS PERFORMING
OPERATE PORTABLE POWER TOOLS	78
LOCATE PART OR STOCK NUMBERS	77
REMOVE OR INSTALL PROCESSOR PUMPS OR FILTERS	77
VISUALLY INSPECT PROCESSORS	73
CONNECT OR DISCONNECT HOSE INTERNAL PLUMBING ON PROCESSORS	71
MEASURE OR CUT PVC OR RUBBER TUBING	71
CONNECT OR DISCONNECT ELECTRICAL POWER TO OR FROM PROCESSORS	70
TROUBLESHOOT ELECTRICAL SYSTEMS ON PROCESSORS	70
CONNECT OR DISCONNECT PROCESSORS TO OR FROM DRAINS	69
CONNECT OR DISCONNECT EXTERNAL CHEMICAL REPLENISHMENT SUPPLY LINES	68
CONNECT OR DISCONNECT POLYVINYLCHLORIDE (PVC) PLUMBING ON PROCESSORS	68
REMOVE OR INSTALL COMPONENTS OF CHAIN DRIVE SYSTEMS ON PROCESSORS	68
OPERATIONALLY CHECK PRINT DRYERS	68
VISUALLY INSPECT PRINT DRYERS	68
CONNECT OR DISCONNECT EXTERNAL WATER SUPPLIES TO PROCESSORS	66
TROUBLESHOOT CHEMICAL REPLENISHING SYSTEMS ON PROCESSORS	66
ALIGN OR ADJUST PRINT DRYERS	65
OPERATIONALLY CHECK PRINT WASHERS	65
REMOVE OR REPLACE COMPONENTS OF PRINT DRYERS	65

TABLE 16
 REPRESENTATIVE TASKS PERFORMED BY 70 PERCENT OR MORE 404X1 PERSONNEL
 IN THEIR FIRST ASSIGNMENT

TASK	PERCENT MEMBERS PERFORMING
VISUALLY INSPECT FILM MAGAZINES	87
PERFORM OPERATIONAL CHECKS OF AIRCRAFT CAMERA SYSTEMS	84
ASSEMBLE OR DISASSEMBLE FILM MAGAZINES	84
CLEAN OR LUBRICATE FILM MAGAZINES	84
LOCATE PART OR STOCK NUMBERS	82
BENCH CHECK RADAR RECORDING CAMERAS	82
OPERATIONALLY CHECK AIRCRAFT CAMERA SYSTEMS	82
COMPLETE, REVIEW, OR ATTACH REPAIRABLE ITEM PROCESSING TAG FORMS (AFTO FORM 350)	79
REMOVE OR INSTALL RADAR RECORDING CAMERAS ON AIRCRAFT	79
UPLOAD OR DOWNLOAD FILM IN MAGAZINES	79
ASSEMBLE OR DISASSEMBLE RADAR RECORDING CAMERAS	79
BENCH CHECK FILM MAGAZINES	79
VISUALLY INSPECT RADAR RECORDING CAMERAS OR COMPONENTS	79
CLEAN OR LUBRICATE AIRCRAFT CAMERA COMPONENTS	74
PERFORM OPERATIONALLY CHECKS OF FILM MAGAZINES	74
REMOVE OR REPLACE AIRCRAFT CAMERA ELECTRICAL COMPONENTS	74

ANALYSIS OF CONUS/OVERSEAS GROUPS

Comparisons of tasks performed by 5-skill level personnel stationed within the CONUS and those stationed overseas were made for both the 404X1 and 404X0 career ladders.

Tables 17 and 18 list those tasks which best differentiate between the two groups in each ladder. The two 40451 groups showed the greatest differences, with CONUS personnel performing an average of 101 tasks as compared to an average of 57 tasks for overseas personnel. Thus, the CONUS jobs appear more diversified than those overseas. A larger percentage of the CONUS personnel were involved in tasks involving the maintenance of aircraft camera film magazines and aircraft film, and tasks involving the alignment or adjustment of camera mechanisms. CONUS personnel spent approximately two percent of their overall time processing aircraft camera film or weapon system evaluation (WSEM) tapes (Duty H), while overseas personnel did not perform this duty. However, the overseas personnel had about one year more experience in both the career field and in military service.

The two 40450 groups revealed no differences in the average number of tasks performed (179 for both), and only a slight difference in experience level, with overseas personnel having an average of seven months more experience in the career field. However, a significantly larger percentage of overseas members were stationed in mobility labs or reconnaissance sites. Consequently, a greater percentage of overseas members performed tasks related to mobile facilities and used more pieces of shop equipment. A greater percentage of members also performed tasks related to reconnaissance missions such as maintaining continuous contact printers, projection printers, light tables, and film titlers. In addition, more overseas personnel performed tasks involving the installation and maintenance of processor systems, and the maintenance of water heaters.

TABLE 17

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 404X1 CONUS AND OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

<u>TASK</u>	<u>CONUS</u>	<u>OVERSEAS</u>	<u>DIFFERENCE</u>
G233 REMOVE OR REPLACE AIRCRAFT FILM MAGAZINE DRIVE MECHANISMS	67	4	+63
G236 REMOVE OR REPLACE AIRCRAFT FILM MAGAZINE FILM TRANSPORT MECHANISMS	67	8	+58
G188 ALIGN OR ADJUST FILM SUPPLY OR TAKE UP MECHANISMS	79	21	+58
G232 REMOVE OR REPLACE AIRCRAFT FILM MAGAZINE CLUTCHES OR CLUTCH ASSEMBLIES	73	17	+56
G250 REMOVE OR REPLACE COMPONENTS OF FILM TRANSPORT MECHANISMS	61	8	+53
F149 PERFORM PREFLIGHT INSPECTIONS OF AIRCRAFT CAMERAS	67	17	+50
G190 ALIGN OR ADJUST PRESSURE PLATE TENSION	49	4	+45
G204 BENCH CHECK FILM MAGAZINES	84	42	+43
G234 REMOVE OR REPLACE AIRCRAFT FILM MAGAZINE FILM FOOTAGE INDICATORS	63	21	+42
G240 REMOVE OR REPLACE AIRCRAFT FILM MAGAZINE PRESSURE PLATES	63	21	+42
G185 ALIGN OR ADJUST AIRCRAFT CAMERA ROTATING DISC SHUTTERS	45	4	+41
G217 FILE OR POLISH AIRCRAFT CAMERA COMPONENTS	49	8	+41
G191 ALIGN OR ADJUST SPROCKET OR SPINDLE TENSION	53	13	+40
G249 REMOVE OR REPLACE COMPONENTS OF FILM SHUTTER MECHANISMS	53	13	+40
G235 REMOVE OR REPLACE AIRCRAFT FILM MAGAZINE FILM SHUTTLE MECHANISMS	47	8	+39
G213 CLEAN OR LUBRICATE FILM MAGAZINES	88	50	+38

TABLE 18

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 404XO CONUS AND OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

<u>TASK</u>	<u>CONUS</u>	<u>OVERSEAS</u>	<u>DIFFERENCE</u>
J524 VISUALLY INSPECT WATER HEATERS	31	66	-35
P980 CONNECT OR DISCONNECT WATER TO MOBILITY LABS	15	49	-34
Q1006 PERFORM OPERATOR MAINTENANCE ON BENCH GRINDERS	42	76	-34
J499 TROUBLESHOOT WATER HEATERS	25	59	-34
J510 VISUALLY INSPECT LIGHT TABLES	52	85	-33
J485 TROUBLESHOOT LIGHT TABLES	43	76	-33
P987 PERFORM CORROSION CONTROL ON RELOCATABLE FACILITIES	17	49	-32
K538 ALIGN OR ADJUST MANUAL PROJECTION PRINTERS	44	76	-32
K653 VISUALLY INSPECT CONTINUOUS CONTACT PRINTERS	32	64	-32
P976 CONNECT OR DISCONNECT DRAINS IN MOBILITY LABS	15	46	-31
P979 CONNECT OR DISCONNECT POWER TO OR BETWEEN RELOCATION FACILITIES	14	44	-30
J480 TROUBLESHOOT DENSITOMETERS	41	71	-30
Q1005 PERFORM OPERATOR MAINTENANCE ON AIR COMPRESSORS	24	54	-30
K533 ALIGN OR ADJUST ELECTRONIC CONTINUOUS CONTACT PRINTERS	22	51	-29
K531 ALIGN OR ADJUST CONTINUOUS CONTACT PRINTERS	34	63	-29
J488 TROUBLESHOOT PRINT DRYERS	52	81	-29
P975 CHECK TIRE PRESSURES OR HYDRAULIC SYSTEMS ON TRANSPORTERS	16	44	-28
P983 INSTALL OR REMOVE TRANSPORTERS ON OR OFF RELOCATABLE FACILITIES	16	44	-28
I319 REMOVE OR INSTALL AIR TUBE DRYER SYSTEMS	50	78	-28

ANALYSIS OF 404X0 BASE PHOTO/MOTION PICTURE LAB AND RECONNAISSANCE WORK SITE GROUPS

Comparisons between 404X0 personnel stationed at base photo or motion picture labs and personnel stationed at reconnaissance (recon) work sites were made. Table 19 shows the relative amount of time spent by each group on tasks within the duty headings used to structure the inventory task list. The base photo and motion picture lab personnel spent more time performing tasks related to maintenance of ground still camera and motion picture cameras, audiovisual equipment, and camera associated equipment (Duties L through O). Recon personnel, conversely, spent more of their time installing and maintaining photo processing equipment, processor support systems, printer systems, mobility labs, and working with shop equipment (Duties I through K, and P through Q). Recon personnel also spent 2 percent more of their time inspecting equipment and evaluating subordinates. Those individual tasks within these duty headings which best differentiate between these two groups are listed in Table 20.

The summary of selected background data on the two work site groups presented in Table 21 reveals that the recon group members are slightly more experienced in military service and in the career field, and that they supervise a slightly higher average number of subordinates. Job interest, perceived utilization of talents, and reenlistment intentions appear to be the same for both groups. However, a slightly higher percentage of recon group members indicated they felt their training was utilized at least fairly well.

TABLE 19

PERCENT TIME SPENT ON DUTIES BY 404X0 BASE PHOTO/MOTION PICTURE
AND RECONNAISSANCE (RECON) PERSONNEL*

	BASE PHOTO/MOTION PICTURE (N=107)	RECON (N=115)
<u>SUPERVISORY DUTIES</u>		
A ORGANIZING AND PLANNING	2	2
B DIRECTING AND IMPLEMENTING	5	5
C INSPECTING AND EVALUATING	2	4
D TRAINING	2	2
TOTAL	11	13
<u>DUTIES INVOLVING MAINTENANCE FORMS AND RECORDS</u>		
E WORKING WITH FORMS, RECORDS, AND REPORTS	9	9
TOTAL	9	9
<u>404X0 TECHNICAL DUTIES</u>		
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	17	22
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	18	24
K MAINTAINING PRINTER SYSTEMS	9	14
L MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	11	2
M MAINTAINING GROUND MOTION PICTURE CAMERAS	3	0
N MAINTAINING CAMERA ASSOCIATED EQUIPMENT	5	1
O MAINTAINING AUDIOVISUAL EQUIPMENT	8	0
P MAINTAINING MOBILITY LABS	0	6
TOTAL	71	69
<u>DUTIES INVOLVING OPERATOR AND MAINTENANCE OF EQUIPMENT</u>		
Q OPERATING AND MAINTAINING SHOP EQUIPMENT	4	7
R OPERATING TEST EQUIPMENT	2	2
TOTAL	6	9

* Two percent and one percent of time spent for base photo/motion picture and recon groups, respectively, was on 404X1 duties F through H.

TABLE 20

TASKS MOST CLEARLY DIFFERENTIATING BETWEEN 404X0 BASE PHOTO/MOTION PICTURE LAB PERSONNEL
AND RECONNAISSANCE (RECON) PERSONNEL

TASK	PERCENT MEMBERS PERFORMING		DIFFERENCE
	BASE PHOTO/ MOTION PICTURE	RECON	
B32 DIRECT OR PARTICIPATE IN MOBILITY EXERCISE	9	61	-52
K653 VISUALLY INSPECT CONTINUOUS CONTACT PRINTERS	17	68	-51
Q995 OPERATE AIR COMPRESSORS	19	64	-45
K600 OPERATIONALLY CHECK CONTINUOUS CONTACT PRINTERS	14	57	-43
K636 TROUBLESHOOT CONTINUOUS CONTACT PRINTERS	13	54	-41
0965 VISUALLY INSPECT MOTION PICTURE PROJECTORS	54	2	+52
0910 ALIGN OR ADJUST MOTION PICTURE PROJECTORS	50	2	+48
0921 ASSEMBLE OR DISASSEMBLE MOTION PICTURE PROJECTORS	49	1	+48
0954 REMOVE OR REPLACE COMPONENTS OF MOTION PICTURE PROJECTORS	48	1	+47
N866 ASSEMBLE OR DISASSEMBLE ELECTRONIC FLASH UNITS	50	4	+46
N873 ASSEMBLE OR DISASSEMBLE TRIPODS	49	4	+45
0932 CLEAN OR LUBRICATE MOTION PICTURE PROJECTORS	47	2	+45
0943 OPERATIONALLY CHECK MOTION PICTURE PROJECTORS	44	1	+43
L741 VISUALLY INSPECT RANGE FINDERS	51	8	+43
L735 VISUALLY INSPECT FOCAL PLANE SHUTTERS	46	4	+42
L692 CLEAN OR LUBRICATE FOCAL PLANE SHUTTERS	45	3	+42
N875 CLEAN OR LUBRICATE ELECTRONIC FLASH UNITS	45	3	+42
0970 VISUALLY INSPECT STILL PROJECTORS	49	7	+42
L701 CLEAN VIEWFINDERS	45	4	+41
L686 CLEAN OR LUBRICATE COPY CAMERAS	61	20	+41

TABLE 21

SUMMARY OF SELECTED BACKGROUND DATA FOR 404XO BASE PHOTO/MOTION PICTURE AND RECONNAISSANCE (RECON) GROUPS

GROUP	AVERAGE NUMBER OF TASKS	AVERAGE GRADE	TAFMS	TIME IN CAREER FIELD	AVERAGE NUMBER OF PERSONNEL SUPERVISED
BASE PHOTO/MOTION PICTURE	190	4.3	81 MOS	52 MOS	2.6
RECON	180	4.5	89 MOS	64 MOS	3.2

GROUP	JOB INTEREST (PERCENT RESPONDING)			PERCEIVED UTILIZATION OF TALENTS (PERCENT RESPONDING)			PERCEIVED UTILIZATION OF TRAINING (PERCENT RESPONDING)			REENLISTMENT INTENTIONS (PERCENT RESPONDING)	
	INT	SO-SO	DULL	WELL	VERY LITTLE		WELL	VERY LITTLE		YES	NO
BASE PHOTO/ MOTION PICTURE	69	17	14	71	29		60	40		56	44
RECON	68	13	19	70	30		66	34		54	46

COMPARISON OF THE 404X0 SPECIALTY TRAINING STANDARD (STS) WITH SURVEY RESULTS

The precision photo systems repair career ladder specialist and technician both are expected to be qualified to perform routine maintenance and repair tasks on still and motion picture cameras and equipment, and processing and printing equipment. The 3-, 5-, and 7-skill level proficiency standards of the 404X0 STS, dated 2 February 1975, were compared to the survey results. STS items were reviewed in terms of percent members performing related inventory tasks. Paragraphs 1, 2, 3, 4, and 5 were not evaluated since they are considered general information items applicable to most Air Force career ladders.

In general, most of the STS paragraphs were supported by the survey data. Several paragraphs, however, showed low percentages of respondents performing related tasks. These areas are listed in Table 22. As shown, they primarily involve general test equipment (paragraph 12); winterization and climatic storage (paragraph 14a); contact printers (paragraph 19d); photogrammetric rectifiers (paragraph 19f); straighteners (paragraph 21g); colorimeters, spectrophotometers, and argentometers (paragraph 22c); plotters (paragraph 23a); and plotting tables (paragraph 23b). In addition, STS paragraph 7a(1), covering special requisitions, issue, and turn-in slips, showed no proficiency code for 3-skill level personnel, yet the survey data reflected that 30-50 percent of these respondents were performing related tasks.

In light of these survey findings, a review of these STS paragraphs should be considered by appropriate personnel in future STS revisions.

ASSESSMENT OF 404X0 TRAINING

The Plan of Instruction (POI) for the basic precision photo systems specialist course, 3ABR40430, dated, January 1976, was compared to the task performance data for the 77 404X0 survey respondents in their first job assignment (10-34 months TAFMS). The course, which is 24 weeks in length, includes a preliminary block of 10 weeks of modular, self-paced instruction in electronic principles. The remaining 14 weeks covered instruction on specific, major items of equipment used on the job. These items included printers, processors, processor support equipment, quality control equipment, cameras, mobile facilities, and photo intelligence equipment.

Overall, the survey data indicate that most of the training provided by the 3ABR40430 course is either directly or indirectly supported by the percentage of first job incumbents performing related tasks. Two

exceptions, however, were noted. First, Block III, paragraph 7, gives three hours of training on the preparation of equipment for desert, tropical, or arctic conditions, yet 10 percent or less of first job incumbents are performing related tasks. Second, Block IV (Part I) devotes 20.5 hours of instruction to the 6100C electronic narrow film contact printer and the 6170D programmer. The training time allotted to these pieces of equipment does not appear justifiable since less than 10 percent of first job incumbents performed related tasks.

The survey data also indicate that a high percentage of first-job members performed four tasks related to STS paragraph 7a1, special requisitions. Block III of the POI covering supply discipline provides for instruction on basic terms and concepts, but nowhere in the POI is the student taught to fill out the appropriate forms. This instruction should be considered for inclusion in the current POI.

TABLE 22

404X0 STS PARAGRAPHS PERFORMED BY FEWER THAN 15 PERCENT OF 404X0 INCUMBENTS

STS PARAGRAPH(S)	RELATED INVENTORY TASKS	1ST Job (10-34 MOS)	PERCENT MEMBERS PERFORMING			
			3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL	
12a(1)	R1018 OPERATE FREQUENCY COUNTERS	-	7	5	7	
12a(2)	R1026 OPERATE STROBOTACS	-	0	8	10	
12a(7)	R1029 OPERATE TRANSISTOR CHECKERS	12	14	9	9	
12b(1)	N883 OPERATE COLLIMATORS	-	7	11	3	
12b(3)	N884 OPERATE FOCAL SCOPES	-	7	5	3	
14a	P984 INSTALL OR REMOVE WINTERIZATION EQUIPMENT ON OR OFF RELOCATABLE FACILITIES	9	14	9	0	
	R1033 STORE PHOTO EQUIPMENT IN CLIMATIC STORAGE AREA	10	7	11	7	
19d	K539 ALIGN OR ADJUST MOTION PICTURE CONTACT PRINTERS	7	6	8	9	
	K556 ASSEMBLE OR DISASSEMBLE MOTION PICTURE CONTACT PRINTERS	7	5	8	9	
	K573 BENCH CHECK MOTION PICTURE CONTACT PRINTERS	7	4	4	5	
	K590 CLEAN OR LUBRICATE MOTION PICTURE CONTACT PRINTERS	7	5	5	7	
	K608 OPERATIONALLY CHECK MOTION PICTURE CONTACT PRINTERS	7	6	8	9	
	K626 REMOVE OR REPLACE COMPONENTS OF MOTION PICTURE CONTACT PRINTERS	7	9	8	9	
	K644 TROUBLESHOOT MOTION PICTURE CONTACT PRINTERS	7	8	8	9	
	K661 VISUALLY INSPECT MOTION PICTURE CONTACT PRINTERS	7	6	9	12	

TABLE 22 (CONT'D)

404X0 STS PARAGRAPHS PERFORMED BY FEWER THAN 15 PERCENT OF 404X0 INCUMBENTS

STS PARAGRAPH(S)	RELATED INVENTORY TASKS	1ST Job (10-34 MOS)	PERCENT MEMBERS PERFORMING			
			3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL	
19f	K542 ALIGN OR ADJUST PHOTOGRAMMETRIC RECTIFIERS	-	0	3	5	
	K559 ASSEMBLE OR DISASSEMBLE PHOTOGRAMMETRIC RECTIFIERS	-	7	3	3	
	K576 BENCH CHECK PHOTOGRAMMETRIC RECTIFIERS	-	7	1	3	
	K593 CLEAN OR LUBRICATE PHOTOGRAMMETRIC RECTIFIERS	-	7	4	5	
	K611 OPERATIONALLY CHECK PHOTOGRAMMETRIC RECTIFIERS	-	7	3	5	
	K629 REMOVE OR REPLACE COMPONENTS OF PHOTOGRAMMETRIC RECTIFIERS	-	7	2	3	
	K647 TROUBLESHOOT PHOTOGRAMMETRIC RECTIFIERS	-	7	3	5	
	K664 VISUALLY INSPECT PHOTOGRAMMETRIC RECTIFIERS	-	7	4	7	
	J380 ALIGN OR ADJUST PRINT STRAIGHTENERS	-	0	7	7	
	J407 BENCH CHECK PRINT STRAIGHTENERS	-	0	6	5	
21g	J436 OPERATIONALLY CHECK PRINT STRAIGHTENERS	-	0	7	3	
	J463 REMOVE OR REPLACE COMPONENTS OF PRINT STRAIGHTENERS	-	0	6	5	
	J489 TROUBLESHOOT PRINT STRAIGHTENERS	-	7	5	3	
	J514 VISUALLY INSPECT PRINT STRAIGHTENERS	-	7	6	5	
	J367 ALIGN OR ADJUST ARGENTOMETERS	-	0	2	3	
	J384 ALIGN OR ADJUST SPECTROPHOTOMETERS	-	0	4	3	
22e	J395 BENCH CHECK ARGENTOMETERS	-	0	2	5	
	J411 BENCH CHECK SPECTROPHOTOMETERS	-	0	4	7	
	J423 OPERATIONALLY CHECK ARGENTOMETERS	-	0	2	7	
	J440 OPERATIONALLY CHECK SPECTROPHOTOMETERS	-	0	2	7	
	J449 REMOVE OR REPLACE COMPONENTS OF ARGENTOMETERS	-	0	1	5	
	J467 REMOVE OR REPLACE COMPONENTS OF SPECTROPHOTOMETERS	-	0	2	5	
	J476 TROUBLESHOOT ARGENTOMETERS	-	0	3	5	
		-	0			
		-	0			
		-	0			

TABLE 22 (CONT'D)
404X0 STS PARAGRAPHS PERFORMED BY FEWER THAN 15 PERCENT OF 404X0 INCUMBENTS

STS PARAGRAPH(S)	RELATED INVENTORY TASKS	1ST Job (10-34 MOS)	PERCENT MEMBERS PERFORMING			
			3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL	
23a	J493 TROUBLESHOOT SPECTROPHOTOMETERS	-	0	2	5	
	J502 VISUALLY INSPECT ARGENTOMETERS	-	0	3	7	
	J518 VISUALLY INSPECT SPECTROPHOTOMETERS	-	0	3	9	
	0913 ALIGN OR ADJUST PLOTTERS	-	7	3	2	
	0924 ASSEMBLE OR DISASSEMBLE PLOTTERS	-	7	4	2	
	0935 CLEAN OR LUBRICATE PLOTTERS	-	0	3	2	
	0946 OPERATIONALLY CHECK PLOTTERS	-	7	4	2	
	0957 REMOVE OR REPLACE COMPONENTS OF PLOTTERS	-	7	5	2	
23b	0968 VISUALLY INSPECT PLOTTERS	-	0	5	3	
	0909 ALIGN OR ADJUST FILM PLOTTING TABLES	-	7	6	7	
	0920 ASSEMBLE OR DISASSEMBLE FILM PLOTTING TABLES	-	7	5	3	
	0931 CLEAN OR LUBRICATE FILM PLOTTING TABLES	-	7	4	7	
	0942 OPERATIONALLY CHECK FILM PLOTTING TABLES	-	7	4	5	
	0953 REMOVE OR REPLACE COMPONENTS OF FILM PLOTTING TABLES	-	7	4	3	
	0964 VISUALLY INSPECT FILM PLOTTING TABLES	-	7	7	9	
		-				

COMPARISON OF THE 404X1 SPECIALTY TRAINING STANDARD (STS) WITH SURVEY RESULTS

The aerospace photo systems repair career ladder requires that the specialist and technician both be qualified to perform most maintenance and repair tasks on a large number of cameras and camera systems using the appropriate technical order. A comparison of the 3-, 5-, and 7-skill level proficiency standards of the 404X1 STS, dated 2 December 1974, with the survey results was performed. STS items were reviewed in terms of the percentage of 3-, 5-, and 7-skill level incumbents performing related inventory tasks. Paragraphs 1, 2, 3, 4, 5, and 6 were not subjected to analysis since they are comprised of general information applicable to most career ladders.

Overall, most of the STS paragraphs were substantiated by the survey data, with only two subparagraphs showing a discrepancy with the data. A large percentage of 917-FA radar recording camera system mechanics indicated they process WSEM tapes and maintain the tape processors, yet these tasks were not included under STS paragraphs 13c(4) and 14c(3), model 917-FA (see Table 23). In addition, STS paragraph 13f(4) covers strike camera pods, yet none of the 3-skill level respondents and only low percentages of the 5- and 7-skill level indicated that they perform related tasks (see Table 24).

ASSESSMENT OF THE 404X1 TRAINING

The Plan of Instruction (POI) for the basic aerospace photo systems repairman course 3ABR40431, dated 22 October 1975, was compared to the task performance of the 38 404X1 survey respondents in their first job assignment (9-33 months AFMS). Course 3ABR40431 is 22 weeks in length. It provides the student with ten weeks of modular, self-paced electronic principles instruction; five weeks of instruction on fundamentals of photography, tool maintenance, and maintenance data collection systems; and eight weeks of training on specific types of aerial cameras and camera systems.

Block II, Aerospace Photographic Systems Maintenance Management; Block III, Fundamentals of Photography and Special Treatment and Storage; and Block IV, Maintenance of Hand and Special Tools, appear to be substantiated by the survey data.

Since only a few discrete tasks were available for assessment of each type of camera system covered in Blocks V, VI, VII, VIII, and IX, background items were used in conjunction with task data to facilitate

assessment of each of these blocks of instruction. Blocks V and VI, Gun Camera Systems and Motion Picture Camera Systems, respectively, were substantiated both by percent members performing related tasks and by the number of survey respondents who indicated they maintained specific cameras covered by these blocks of training. Students were being trained on the two most commonly used of the three gun cameras, and on all three of the motion picture cameras used.

In Block VII, Radar Recording Camera Systems, students were being trained on only two of four cameras used: the KS-32 and KS-97A. Since the 917-FA camera is maintained by 18 percent of the survey respondents, and because personnel working on the 917-FA camera perform unique WSEM tape processing and processor maintenance tasks, consideration should be given to including this camera system in the curriculum. (See Table 23, STS paragraph 13c[4] and 14c[3], column 3).

Block VIII, Bombspotting Camera Systems, appears to be supported by the survey data, with students being trained on the only system that survey respondents indicated they maintained.

Within Block IX, Strike Camera Systems, the students were being trained on the only system survey respondents indicated they maintained. However, they were also being given 14 hours of instruction on installation and maintenance of strike camera pods. This training is being utilized by a small percentage of first-job incumbents. (See Table 24, STS paragraph 13f(4), column 3).

In summary, maintenance of the 917-FA radar recording camera system, WSEM tape processing technique, and maintenance of WSEM processing equipment should be considered for inclusion in the present 404X1 curriculum. Conversely, the instruction on strike camera pods should be reexamined for appropriateness in the course.

COMPARISON TO PREVIOUS SURVEY

The results of this survey were compared to the Occupational Survey Report 90-40X-028, Aerospace and Precision Photographic Systems Maintenance Career Ladders, AFSCs 402X0 and 404X0, which summarized the results of the analysis of survey data collected during the period March 1970 through March 1971. There were no significant differences in the findings of these reports.

TABLE 23

TASKS RELATED TO 917-FA RADAR RECORDING CAMERA SYSTEMS NOT INCLUDED IN 404X1 STS

SYS PARAGRAPH(S)	RELATED INVENTORY TASKS	PERCENT MEMBERS PERFORMING			
		1ST Job (9-33 MOS)	3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL
H283	CLEAN FILM PROCESSORS	26	30	13	16
H284	CLEAN WSEM TAPE PROCESSORS	18	30	8	16
H285	EDIT AIRCRAFT CAMERA FILMS	13	30	4	0
H287	MIX CHEMICALS FOR WSEM TAPE PROCESSORS	18	30	8	16
H288	MIX FILM PROCESSING CHEMICALS	21	30	11	16
H290	OPERATE FILM PROCESSORS	24	30	12	18
H291	OPERATE WSEM TAPE PROCESSORS	18	30	8	16
H293	OPERATIONALLY CHECK FILM PROCESSORS	21	30	9	16
H294	OPERATIONALLY CHECK WSEM TAPE PROCESSORS	18	30	8	16
H296	VISUALLY INSPECT FILM PROCESSORS	24	30	12	16
H297	VISUALLY INSPECT WSEM TAPE PROCESSORS	18	30	8	16

13c(4)
14c(3)

TABLE 24

404X1 STS PARAGRAPHS PERFORMED BY FEWER THAN 10 PERCENT OF 404X1 INCUMBENTS

STS PARAGRAPH(S)	RELATED INVENTORY TASKS	1ST Job (9-33 MOS)	PERCENT MEMBERS PERFORMING			
			3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL	
13f(4)	F134 CLEAN AIRCRAFT CAMERA PODS	5	0	9	4	
	F160 REMOVE OR INSTALL GUN CAMERAS IN AIRCRAFT PODS	8	0	8	0	
	F165 REMOVE OR INSTALL STRIKE CAMERAS IN AIRCRAFT PODS	3	0	4	4	
	F174 UPLOAD OR DOWNLOAD PODS ON AIRCRAFT	3	0	5	4	

↓
The following are among the

→ CONCLUSIONS AND RECOMMENDATIONS of this survey

- (1) Several functions were not listed in the AFM 39-1 Specialty Descriptions, yet they were being performed by a high percentage of personnel. Survey data revealed that maintenance of audiovisual equipment, transportation and physical installation of relocatable facilities, completion and review of maintenance forms and annotation of maintenance records, and use and maintenance of shop equipment should be included in future revisions of the 404X0 Specialty Descriptions. The data also revealed that future revisions of the 404X1 Specialty Descriptions should include coordination with intelligence units, aircrew members, or other maintenance sections regarding maintenance and modification of aircraft components; operation and maintenance of WSEM tapes; completion and review of maintenance forms or annotation of maintenance records; and the uploading/downloading and delivery of film.

Examples are cited, and recommendations for revisions in the 404X0 and 404X1 specialty descriptions are cited.

- (2) Several paragraphs in STS 404X0 should be reviewed for their appropriateness. These involve general test equipment (paragraph 12); winterization and climatic storage (paragraph 14a); contact printers (paragraph 19d); photogrammetric rectifiers (paragraph 19f); straighteners (paragraph 21g); colorimeters, spectrophotometers, and argentometers (paragraph 22c); plotters (paragraph 23a); and plotting tables (paragraph 23b). Survey data reflected low percentages of respondents performing related tasks;

- (3) Several areas of training given in Course 3ABR40430 should be reviewed for appropriateness. Training on the preparation of equipment for desert, tropical, or arctic conditions, and on the 6100C electronic narrow film contact printer and 6170D programmer is not justifiable since less than 10 percent of first job incumbents performed related tasks.

- (4) Several paragraphs of STS 404X1 should also be reviewed; (and) A large percentage of 917-FA radar recording camera system mechanics indicated they process WSEM tapes and maintain the tape processors, yet these were not included under STS paragraphs 13c(4) and 14c(3), model 917-FA. In addition, STS paragraph 13f(4) covers strike camera pods, yet very few personnel at each skill level are performing related tasks.

- (5) Maintenance of the 917-FA radar recording camera system, WSEM tape processing technique, and maintenance of WSEM processing equipment should be considered for inclusion in the present curriculum taught in Course 3ABR40431. Conversely, instruction on strike camera pods should be reexamined for appropriateness in the course.

A

APPENDIX A

GROUP ID NUMBER AND TITLE: GRP243 - BOMBER AIRCRAFT RADAR RECORDING CAMERA
SYSTEM NCOICs

PERCENT OF SAMPLE: 4%

MAJOR COMMAND DISTRIBUTION: SAC (65%), TAC (29%), AAC (6%)

LOCATION: CONUS (88%), Overseas (12%)

DAFSC DISTRIBUTION: 40431 (12%), 40451 (41%), 40471 (47%)

AVERAGE GRADE: 5.1

AMOUNT OF SUPERVISION: 71% supervised an average of 2 subordinates

EXPRESSED JOB INTEREST: Dull 12%, So-So 12%, Interesting 76%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	29%	71%
PERCEIVED UTILIZATION OF TRAINING:	35%	65%

AVERAGE NUMBER OF TASKS PERFORMED: 167

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	39
E WORKING WITH FORMS, RECORDS, AND REPORTS	14
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	12
B DIRECTING AND IMPLEMENTING	11
C INSPECTING AND EVALUATING	10
A ORGANIZING AND PLANNING	6
D TRAINING	4

SIX REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G198 Assemble or disassemble radar recording cameras	100
G215 Critique aircraft films for maintenance purposes	100
E129 Review precision measurement equipment laboratory (PMEL) due date rosters	100
B33 Draft correspondence	82
F138 Coordinate with intelligence units on mission requirements	71
F158 Remove or install bomb spotting cameras on aircraft	53

EQUIPMENT USED (50% OR MORE): Pick-up Trucks, Aerial Camera Test Sets, and
Test Benches

NINETY-FOUR PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: KS-32, K-17, KB-25, KD-42, KB-18, KS-97, O-15, TGM 65

GROUP ID NUMBER AND TITLE: GRP191 - BOMBER AIRCRAFT RADAR RECORDING CAMERA
SYSTEM MECHANICS (SHOP)

PERCENT OF SAMPLE: 4%

MAJOR COMMAND DISTRIBUTION: SAC (88%), ATC (6%), USAF (6%)

LOCATION: CONUS (94%), Overseas (6%)

DAFSC DISTRIBUTION: 40431 (12%), 40451 (69%), 40471 (19%)

AVERAGE GRADE: 4.0

AMOUNT OF SUPERVISION: 25% supervised an average of 1 to 2 subordinates

EXPRESSED JOB INTEREST: Dull 31%, So-So 19%, Interesting 50%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	56%	44%
PERCEIVED UTILIZATION OF TRAINING:	44%	56%

AVERAGE NUMBER OF TASKS PERFORMED: 95

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	58
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	19
E WORKING WITH FORMS, RECORDS, AND REPORTS	12

SIX REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

G237 Remove or replace aircraft film magazine gears	94
G263 Remove or replace radar camera clocks	94
G269 Solder connections in aircraft cameras	94
F163 Remove or install radar recording cameras on aircraft	94
E127 Review daily document registers	81
G258 Remove or replace indicator lights in control boxes or intervalometers	75

EQUIPMENT USED (50% OR MORE): Aerial Camera Test Stands

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: KS-32, K-17, O-15

GROUP ID NUMBER AND TITLE: GRPI01 - BOMBER AIRCRAFT RADAR RECORDING CAMERA
SYSTEM MECHANICS (FLIGHTLINE)

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: SAC (92%), TAC (8%)

LOCATION: CONUS (92%), Overseas (8%)

DAFSC DISTRIBUTION: 40450 (8%), 40451 (67%), 40471 (25%)

AVERAGE GRADE: 4.3

AMOUNT OF SUPERVISION: 33% supervised 1 to 2 subordinates

EXPRESSED JOB INTEREST: Dull 42%, So-So 25%, Interesting 33%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	75%	25%
PERCEIVED UTILIZATION OF TRAINING:	75%	25%

AVERAGE NUMBER OF TASKS PERFORMED: 72

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	49
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	26
E WORKING WITH FORMS, RECORDS, AND REPORTS	10

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F173 Upload or download film in magazines	100
F163 Remove or install radar recording cameras on aircraft	100
G245 Remove or replace components of data lights	92
G263 Remove or replace radar camera clocks	83
F141 Deliver processed film or tapes to using agencies	83

EQUIPMENT USED (50% OR MORE): Aerial Camera Test Stands

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: KS-32, K-17, O-15

GROUP ID NUMBER AND TITLE: GRP068 - FIGHTER AIRCRAFT RADAR RECORDING CAMERA
SYSTEM MECHANICS

PERCENT OF SAMPLE: 4%

MAJOR COMMAND DISTRIBUTION: USAFE (56%), TAC (33%), SAC (6%), PACAF (6%)

LOCATION: CONUS (28%), Overseas (67%), Not Reported (5%)

DAFSC DISTRIBUTION: 40431 (11%), 40451 (89%)

AVERAGE GRADE: 4.1

AMOUNT OF SUPERVISION: 17% supervised 1 subordinate each

EXPRESSED JOB INTEREST: Dull 33%, So-So 17%, Interesting 50%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:*	45%	50%
PERCEIVED UTILIZATION OF TRAINING:	61%	39%

AVERAGE NUMBER OF TASKS PERFORMED: 58

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
G PERFORMING SHOP MAINTENANCE OR AIRCRAFT CAMERA SYSTEMS	47
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	21
E WORKING WITH FORMS, RECORDS, AND REPORTS	15
B DIRECTING AND IMPLEMENTING	6
R OPERATING TEST EQUIPMENT	5

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G198 Assemble or disassemble radar recording cameras	100
F145 Operate ground power units	94
F163 Remove or install radar recording cameras on aircraft	89
E112 Complete or review Maintenance Data Collection Record forms (AFTO Form 349)	83
G179 Align gun or radar camera periscopes	67

EQUIPMENT USED (50% OR MORE): Aerial Camera Test Stands, Boresighting Tools
and Alignment Fixtures, VTVMs

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: KB-25, KD-42, KB-18, KB-21, KS-97

* 5% Not Reported

GROUP ID NUMBER AND TITLE: GRP172 - FIGHTER AIRCRAFT GUN CAMERA MECHANICS

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: TAC (60%), PACAF (20%), AAC (20%)

LOCATION: CONUS (60%), Overseas (40%)

DAFSC DISTRIBUTION: 40451 (100%)

AVERAGE GRADE: 3.8

AMOUNT OF SUPERVISION: None

EXPRESSED JOB INTEREST: Dull 60%, So-So 20%, Interesting 20%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:*	40%	40%
PERCEIVED UTILIZATION OF TRAINING:	20%	80%

AVERAGE NUMBER OF TASKS PERFORMED: 82

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	59
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	26
E WORKING WITH FORMS, RECORDS, AND REPORTS	6

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G179 Align gun or radar camera periscopes	100
G196 Assemble or disassemble gun cameras	100
F145 Operate ground power units	100
F161 Remove or install gun cameras on aircraft	100
F131 Boresight gun cameras	80

EQUIPMENT USED (50% OR MORE): Pick-up Trucks, Camera Test Stands,
Boresighting Tools and Alignment Fixtures, Gun Camera Test Sets,
Panoramic Test Sets, Test Benches, VTVMs

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: KD-42, KB-18, KB-25, KS-27, KS-97, KB-21, N-9

* 20% Not Reported

GROUP ID NUMBER AND TITLE: GRP129 - FIGHTER AIRCRAFT STRIKE CAMERA SYSTEM
MECHANICS (CONUS)

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: TAC (83%), USAF (17%)

LOCATION: CONUS (83%), Overseas (17%)

DAFSC DISTRIBUTION: 40451 (50%), 40471 (50%)

AVERAGE GRADE: 4.2

AMOUNT OF SUPERVISION: 33% supervised 1 subordinate each

EXPRESSED JOB INTEREST: Dull 50%, So-So 33%, Interesting 17%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	83%	17%
PERCEIVED UTILIZATION OF TRAINING:	67%	33%

AVERAGE NUMBER OF TASKS PERFORMED: 61

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	41
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	30
E WORKING WITH FORMS, RECORDS, AND REPORTS	13
B DIRECTING AND IMPLEMENTING	8

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

G274 Time aircraft camera film magazines	100
F154 Remove or install aircraft camera door components	100
F166 Remove or install strike cameras on aircraft	100
B32 Direct or participate in mobility exercises	83
G199 Assemble or disassemble strike cameras	83

EQUIPMENT USED (50% OR MORE): Pick-up Trucks , Panoramic Camera Test Sets

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEM: KB-18

GROUP ID NUMBER AND TITLE: GRP230 - FIGHTER AIRCRAFT STRIKE CAMERA SYSTEM
MECHANICS (OVERSEAS)

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: USAFE (50%), TAC (26%), MAC (12%), AFSC (12%)

LOCATION: CONUS (38%), Overseas (62%)

DAFSC DISTRIBUTION: 40470 (12%), 40431 (12%), 40471 (76%)

AVERAGE GRADE: 5.0

AMOUNT OF SUPERVISION: 37% supervised 2 to 3 subordinates

EXPRESSED JOB INTEREST: Dull 12%, So-So 38%, Interesting 50%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	50%	50%
PERCEIVED UTILIZATION OF TRAINING:	38%	62%

AVERAGE NUMBER OF TASKS PERFORMED: 129

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	43
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	20
E WORKING WITH FORMS, RECORDS, AND REPORTS	11
B DIRECTING AND IMPLEMENTING	10
C INSPECTING AND EVALUATING	5
D TRAINING	4

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G199 Assemble or disassemble strike cameras	100
F152 Remove or install aircraft camera compartment heating system components	100
G229 Remove or replace aircraft camera overrun controls	88
B24 Coordinate with aircraft maintenance or other agencies for modification of aircraft	88
D97 Maintain training records, charts, or graphs	75

EQUIPMENT USED (50% OR MORE): Industrial Tractors , Pick-up Trucks,
1 1/2 Ton Trucks, Aerial Camera Test Sets, Boresighting Tools and Alignment
Fixtures, Panoramic Camera Test Sets, Test Benches

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: KB-18, KB-25, KD-42, DBM-5, KS-27, KS-97, N-9

GROUP ID NUMBER AND TITLE: GRP045 - FIGHTER AIRCRAFT MOTION PICTURE CAMERA
MECHANICS

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: AFSC (60%), MAC (40%)

LOCATION: CONUS (60%), Overseas (40%)

DAFSC DISTRIBUTION: 40450 (40%), 40451 (40%), 40471 (20%)

AVERAGE GRADE: 3.8

AMOUNT OF SUPERVISION: None

EXPRESSED JOB INTEREST: Dull 40%, So-So 20%, Interesting 40%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	60%	40%
PERCEIVED UTILIZATION OF TRAINING:	40%	60%

AVERAGE NUMBER OF TASKS PERFORMED: 74

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	55
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	13
E WORKING WITH FORMS, RECORDS, AND REPORTS	13

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

G177 Adjust aircraft camera motor speed	100
G188 Align or adjust film supply or take up mechanisms	100
G192 Assemble or disassemble aircraft motion picture cameras	100
F149 Perform preflight inspections of aircraft cameras	80
E124 Maintain or annotate Historical Record forms (AFTO Form 95)	80

EQUIPMENT USED (50% OR MORE): Boresighting Tools and Alignment Fixtures,
Tube Testers, Bench Grinders

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA
SYSTEMS: DBM-5, DBM-4

GROUP ID NUMBER AND TITLE: GRP107 - F-106 WSEM TAPE PROCESSING TECHNICIANS

PERCENT OF SAMPLE: 4%

MAJOR COMMAND DISTRIBUTION: ADC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40431 (18%), 40451 (35%), 40471 (47%)

AVERAGE GRADE: 4.6

AMOUNT OF SUPERVISION: 35% supervised an average of 2 subordinates

EXPRESSED JOB INTEREST: Dull 12%, So-So 18%, Interesting 70%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	41%	59%
PERCEIVED UTILIZATION OF TRAINING:	53%	47%

AVERAGE NUMBER OF TASKS PERFORMED: 125

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	30
H PROCESSING AIRCRAFT CAMERA FILM AND WEAPON SYSTEM EVALUATION MISSILE (WSEM) TAPES	13
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	13
F PERFORMING FLIGHTLINE MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	10
E WORKING WITH FORMS, RECORDS, AND REPORTS	10
B DIRECTING AND IMPLEMENTING	7

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G208 Bench check radar recording cameras	100
H288 Mix film processing chemicals	100
H291 Operate WSEM tape processors	100
I336 Remove or install modification kits on processors	76
I346 Troubleshoot belt and pulley drive systems on processors	71

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA SYSTEM: 917-FA

GROUP ID NUMBER AND TITLE: GRP152 - CURRICULUM SPECIALISTS

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: ATC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40470 (67%), 40471 (33%)

AVERAGE GRADE: 6.3

AMOUNT OF SUPERVISION: None

EXPRESSED JOB INTEREST: Interesting 100%

At Least Fairly Well

PERCEIVED UTILIZATION OF TALENTS:	100%
PERCEIVED UTILIZATION OF TRAINING:	100%

AVERAGE NUMBER OF TASKS PERFORMED: 11

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

D TRAINING	90
B DIRECTING AND IMPLEMENTING	5
E WORKING WITH FORMS, RECORDS, AND REPORTS	3
A ORGANIZING AND PLANNING	2

FOUR REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

D88 Develop resident course curriculum or career development course materials	100
D89 Develop tests	100
D95 Evaluate training methods, techniques, or programs	100
D87 Determine training requirements	100

GROUP ID NUMBER AND TITLE: GRP062 - FIRSTLINE SUPERVISORS

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: MAC (31%), TAC (23%), USAFE (23%), PACAF (15%)

LOCATION: CONUS (54%), Overseas (46%)

DAFSC DISTRIBUTION: 40450 (15%), 40470 (77%), 40491 (8%)

AVERAGE GRADE: 5.9

AMOUNT OF SUPERVISION: 85% supervised an average of 4 or 5 subordinates

EXPRESSED JOB INTEREST: Interesting 100%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	0%	10%
PERCEIVED UTILIZATION OF TRAINING:	8%	92%

AVERAGE NUMBER OF TASKS PERFORMED: 143

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
B DIRECTING AND IMPLEMENTING	14
E WORKING WITH FORMS, RECORDS, AND REPORTS	13
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	13
C INSPECTING AND EVALUATING	11
A ORGANIZING AND PLANNING	8
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	7
K MAINTAINING PRINTER SYSTEMS	7

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
B28 Direct development or maintenance of status boards, graphs, or charts	100
B25 Coordinate with other sections on maintenance or repair of equipment or components	100
E112 Complete or review Maintenance Data Collection Record forms (AFTO Form 349)	100
J515 Visually inspect print washers	92
C59 Evaluate inspection reports or procedures	92

GROUP ID NUMBER AND TITLE: GRP065 - MAINTENANCE SUPERVISORS

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: TAC (30%), SAC (20%), USAFE (20%), MAC (10%),
AFSC (10%), ADC (10%)

LOCATION: CONUS (80%), Overseas (20%)

DAFSC DISTRIBUTION: 40470 (40%), 40471 (30%), 40491 (30%)

AVERAGE GRADE: 7.1

AMOUNT OF SUPERVISION: 90% supervised an average of 3 subordinates

EXPRESSED JOB INTEREST: Dull 20%, Interesting 80%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	20%	80%
PERCEIVED UTILIZATION OF TRAINING:	30%	70%

AVERAGE NUMBER OF TASKS PERFORMED: 60

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	32
C INSPECTING AND EVALUATING	26
A ORGANIZING AND PLANNING	17
E WORKING WITH FORMS, RECORDS, AND REPORTS	11
D TRAINING	10

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

B23 Conduct or participate in staff meetings	100
B33 Draft correspondence	100
C62 Evaluate maintenance or use of workspace, equipment or supplies	80
A2 Assign personnel to duty positions	80
D87 Determine training requirements	80

GROUP ID NUMBER AND TITLE: GRP126 - RECONNAISSANCE (RECON) COLOR PRINTER EQUIPMENT
MAINTENANCE PERSONNEL

PERCENT OF SAMPLE: 8%

MAJOR COMMAND DISTRIBUTION: TAC (36%), SAC (27%), PACAF (12%), USAF (9%),
AFSC (6%), MAC (6%), ATC (3%)

LOCATION: CONUS (76%), Overseas (24%)

DAFSC DISTRIBUTION: 40430 (6%), 40450 (61%), 40470 (27%), 40491 (6%)

AVERAGE GRADE: 5.3

AMOUNT OF SUPERVISION: 52% supervised an average of 4 subordinates

EXPRESSED JOB INTEREST: Dull 6%, So-So 18%, Interesting 76%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	18%	82%
PERCEIVED UTILIZATION OF TRAINING:	21%	79%

AVERAGE NUMBER OF TASKS PERFORMED: 327

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	28
K MAINTAINING PRINTER SYSTEMS	23
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	18
L MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	5

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
J383 Align or adjust slide mounting presses	85
K599 Operationally check contact strip printers	70
K604 Operationally check exposure analyzers	55
K641 Troubleshoot manual color projection printers	73
K651 Visually inspect beacon precision enlargers	58

EQUIPMENT USED (50% OR MORE): Tachometers, Tube Testers, VOMs, VTVMs,
Air Compressors, Bench Grinders, Drill Presses

SEVENTY-SIX PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING GROUND CAMERA
SYSTEMS: 4X5 Graflex, Polaroid Land/ID, KE-46, KE-48

GROUP ID NUMBER AND TITLE: GRP180 - MOBILITY LAB PRINTER EQUIPMENT MAINTENANCE PERSONNEL

PERCENT OF SAMPLE: 10%

MAJOR COMMAND DISTRIBUTION: TAC (55%), USAFE (28%), PACAF (17%)

LOCATION: CONUS (52%), Overseas (48%)

DAFSC DISTRIBUTION: 40430 (7%), 40450 (86%), 40470 (7%)

AVERAGE GRADE: 3.8

AMOUNT OF SUPERVISION: 29% supervised an average of 2 to 3 subordinates

EXPRESSED JOB INTEREST: Dull 22%, So-So 14%, Interesting 64%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	29%	71%
PERCEIVED UTILIZATION OF TRAINING:	33%	67%

AVERAGE NUMBER OF TASKS PERFORMED: 192

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

I	INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	28
J	INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	25
K	MAINTAINING PRINTER SYSTEMS	15
P	MAINTAINING MOBILITY LABS	9
Q	OPERATING AND MAINTAINING SHOP EQUIPMENT	9

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

Q995	Operate air compressors	93
J446	Operationally check water heaters	86
K531	Align or adjust continuous contact printers	83
P987	Perform corrosion control on relocatable facilities	76
K607	Operationally check manual projection printers	74

EQUIPMENT USED (50% OR MORE): Pick-up Trucks, Tachometers, VTVMs, Air Compressors, Bench Grinders, Bench Presses, Drill Presses

GROUP ID NUMBER AND TITLE: GRP174 - PROCESSOR DRIVE SYSTEMS MAINTENANCE PERSONNEL

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: TAC (50%), MAC (33%), SAC (17%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40430 (17%), 40450 (83%)

AVERAGE GRADE: 3.7

AMOUNT OF SUPERVISION: 17% supervised 1 subordinate

EXPRESSED JOB INTEREST: Dull 17%, So-So 17%, Interesting 66%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	50%	50%
PERCEIVED UTILIZATION OF TRAINING:	83%	17%

AVERAGE NUMBER OF TASKS PERFORMED: 171

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

I	INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	41
J	INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	25
K	MAINTAINING PRINTER SYSTEMS	16

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

I310	Coordinate with civil engineering on installation of power or water supplies	100
I322	Remove or install chain and clutch drive systems on processors	100
I335	Remove or install gear train drive systems on processors	100
I356	Troubleshoot friction drive film take up systems on processors	100
J383	Align or adjust slide mounting presses	83

EQUIPMENT USED (50% OR MORE): Bench Grinders, Drill Presses

GROUP ID NUMBER AND TITLE: GRP145 - RECONNAISSANCE (RECON) TECHNICAL PRINTER
EQUIPMENT MAINTENANCE PERSONNEL

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: SAC (57%), AFSC (43%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40450 (71%), 40470 (29%)

AVERAGE GRADE: 4.6

AMOUNT OF SUPERVISION: 28% supervised 2 or 3 subordinates

EXPRESSED JOB INTEREST: So-So 14%, Interesting 86%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	0%	100%
PERCEIVED UTILIZATION OF TRAINING:	14%	86%

AVERAGE NUMBER OF TASKS PERFORMED: 212

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING
EQUIPMENT
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS
K MAINTAINING PRINTER SYSTEMS

32
29
16

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

J375 Align or adjust film viewers
J475 Remove or replace components of wide film titlers
K579 Clean or lubricate becon precision enlargers
J412 Bench check splicers
J482 Troubleshoot editors

100
100
100
86
57

EQUIPMENT USED (50% OR MORE): Pyrometers, Tachometers, Tube Testers, VOMs,
VTVMs, Bench Grinders, Bench Presses

GROUP ID NUMBER AND TITLE: GRP083 - APPRENTICE RECONNAISSANCE (RECON) PHOTO
LAB REPAIRMEN

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: SAC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40430 (40%), 40450 (60%)

AVERAGE GRADE: 4.0

AMOUNT OF SUPERVISION: 20% supervised 2 subordinates

EXPRESSED JOB INTEREST: So-So 20%, Interesting 80%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	40%	60%
PERCEIVED UTILIZATION OF TRAINING:	60%	40%

AVERAGE NUMBER OF TASKS PERFORMED: 27

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	45
E WORKING WITH FORMS, RECORDS, AND REPORTS	21
R OPERATING TEST EQUIPMENT	7

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

J376 Align or adjust light tables	100%
J421 Clean or lubricate light tables	100%
J485 Troubleshoot light tables	100%
E107 Complete Issue/Turn In Request forms (AF Form 2005)	100%
E122 Locate part or stock numbers	100%

EQUIPMENT USED (50% OR MORE): Collimators and Transistor Checkers

GROUP ID NUMBER AND TITLE: GRP067 - STATIONARY RECONNAISSANCE (RECON) PROCESSOR/
PROCESSOR SUPPORT INSTALLATION SPECIALISTS

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: TAC (63%), MAC (25%), SAC (12%)

LOCATION: CONUS (88%), Overseas (12%)

DAFSC DISTRIBUTION: 40450 (100%)

AVERAGE GRADE: 3.9

AMOUNT OF SUPERVISION: None

EXPRESSED JOB INTEREST: Dull 25%, Interesting 75%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	38%	62%
PERCEIVED UTILIZATION OF TRAINING:	13%	87%

AVERAGE NUMBER OF TASKS PERFORMED: 109

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	37
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	31
K MAINTAINING PRINTER SYSTEMS	9
E WORKING WITH FORMS, RECORDS, AND REPORTS	8
Q OPERATING AND MAINTAINING SHOP EQUIPMENT	6

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I300 Connect or disconnect external chemical replenishment supply lines	100
J379 Align or adjust print dryers	88
J443 Operationally check timers	88
J458 Remove or replace components of light tables	88
I339 Remove or install processor pumps or filters	88

EQUIPMENT USED (50% OR MORE): Bench Grinders, Drill Presses

THIRTY-EIGHT PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING GROUND CAMERA
SYSTEMS: KE-46, KE-48, Polaroid Land/ID, 4X5 Graflex

GROUP ID NUMBER AND TITLE: GRP053 - MOBILITY LAB PROCESSOR INSTALLATION
SPECIALISTS

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: TAC (80%), USAFE (20%)

LOCATION: CONUS (80%), Overseas (20%)

DAFSC DISTRIBUTION: 40450 (100%)

AVERAGE GRADE: 3.8

AMOUNT OF SUPERVISION: 20% supervised one subordinate

EXPRESSED JOB INTEREST: Dull 60%, Interesting 40%

	<u>Little Or Not at all</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	80%	20%
PERCEIVED UTILIZATION OF TRAINING:	40%	60%

AVERAGE NUMBER OF TASKS PERFORMED: 59

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	29
P MAINTAINING MOBILITY LABS	21
Q OPERATING AND MAINTAINING SHOP EQUIPMENT	14
E WORKING WITH FORMS, RECORDS, AND REPORTS	12

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I344 Thread metal or PVC pipe or tubing	100
P976 Connect or disconnect drains in mobility labs	100
I307 Connect or disconnect processors to or from drains	80
Q995 Operate air compressors	80
E101 Annotate Nonpowered AGE Record forms (AFTO Form 454)	80

EQUIPMENT USED (50% OR MORE): Air Compressors, Bench Grinders, Bench Presses,
Drill Presses

GROUP ID NUMBER AND TITLE: GRP102 - MOTION PICTURE LAB PROCESSOR INSTALLATION SPECIALISTS

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: MAC (86%), SAC (7%), USAF (7%)

LOCATION: CONUS (93%), Overseas (7%)

DAFSC DISTRIBUTION: 40430 (7%), 40450 (86%), 40470 (7%)

AVERAGE GRADE: 4.0

AMOUNT OF SUPERVISION: 14% supervised an average of 3 subordinates

EXPRESSED JOB INTEREST: Dull 21%, So-So 14%, Interesting 65%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	50%	50%
PERCEIVED UTILIZATION OF TRAINING:	50%	50%

AVERAGE NUMBER OF TASKS PERFORMED: 80

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	55
E WORKING WITH FORMS, RECORDS, AND REPORTS	14
Q OPERATING AND MAINTAINING SHOP EQUIPMENT	11

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
I300 Connect or disconnect external chemical replenishment supply lines	100
I363 Troubleshoot turbulation systems	86
E109 Complete Non-NSN Requisition (Manual) forms (DD Form 1348-6)	71
I312 Design or fabricate modifications for processors	64
Q998 Operate drill presses	64

EQUIPMENT USED (50% OR MORE): Bench Grinders, Bench Presses, Drill Presses

GROUP ID NUMBER AND TITLE: GRP168 - BASE PHOTO LAB MAINTENANCE PERSONNEL I

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: SAC (36%), TAC (36%), AFSC (9%), ATC (9%), AU (9%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40450 (82%), 40470 (18%)

AVERAGE GRADE: 4.1

AMOUNT OF SUPERVISION: 9% supervised an average of 2 subordinates

EXPRESSED JOB INTEREST: Dull 9%, Interesting 82%, Not Reported 9%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	9%	91%
PERCEIVED UTILIZATION OF TRAINING:	27%	73%

AVERAGE NUMBER OF TASKS PERFORMED: 300

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	21
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	18
L MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	17
K MAINTAINING PRINTER SYSTEMS	9
N MAINTAINING CAMERA ASSOCIATED EQUIPMENT	9
O MAINTAINING AUDIOVISUAL EQUIPMENT	8
E WORKING WITH FORMS, RECORDS, AND REPORTS	5

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
J381 Align or adjust print washers	100
J488 Troubleshoot print dryers	100
I339 Remove or install processor pumps or filters	100
N866 Assemble or disassemble electronic flash units	100
L708 Remove or replace copy cameras or components	91

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING GROUND CAMERA SYSTEMS: KE-48, 4X5 Calumet Studio, KE-46, Polaroid Land/ID, 4X5 Graflex, KE-58

NINE PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA SYSTEMS:
DBM-4, DBM-5

GROUP ID NUMBER AND TITLE: GRP087 - BASE PHOTO LAB MAINTENANCE PERSONNEL II

PERCENT OF SAMPLE: 7%

MAJOR COMMAND DISTRIBUTION: SAC (56%), TAC (11%), MAC (11%), ATC (11%), USAFE (7%), PACAF (4%)

LOCATION: CONUS (89%), Overseas (11%)

DAFSC DISTRIBUTION: 40430 (7%), 40450 (85%), 40470 (7%)

AVERAGE GRADE: 4.1

AMOUNT OF SUPERVISION: 26% supervised an average of 1 subordinate

EXPRESSED JOB INTEREST: Dull 15%, So-So 22%, Interesting 53%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	37%	63%
PERCEIVED UTILIZATION OF TRAINING:	48%	52%

AVERAGE NUMBER OF TASKS PERFORMED: 156

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

J	INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	22
L	MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	19
K	MAINTAINING PRINTER SYSTEMS	13
N	MAINTAINING CAMERA ASSOCIATED EQUIPMENT	9
I	INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	9
O	MAINTAINING AUDIOVISUAL EQUIPMENT	8
E	WORKING WITH FORMS, RECORDS, AND REPORTS	8

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

J381	Align or adjust print washers	96
J488	Troubleshoot print dryers	96
K583	Clean or lubricate manual contact printers	96
L703	Operationally check copy cameras	78
N866	Assemble or disassemble electronic flash units	74

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING GROUND CAMERA SYSTEMS: 4X5 Calumet Studio, 4X5 Graflex, KE-48, KE-46

GROUP ID NUMBER AND TITLE: GRP228 - BASE PHOTO LAB MOTION PICTURE MAINTENANCE SPECIALISTS

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: MAC (46%), AFSC (31%), ATC (23%)

LOCATION: CONUS (92%), Overseas (8%)

DAFSC DISTRIBUTION: 40450 (92%), 40470 (8%)

AVERAGE GRADE: 4.1

AMOUNT OF SUPERVISION: 15% supervised an average of 3 subordinates

EXPRESSED JOB INTEREST: Dull 15%, So-So 15%, Interesting 70%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	23%	77%
PERCEIVED UTILIZATION OF TRAINING:	39%	61%

AVERAGE NUMBER OF TASKS PERFORMED: 450

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE PERCENT TIME SPENT BY ALL MEMBERS</u>
J INSTALLING AND MAINTAINING PROCESSOR SUPPORT SYSTEMS	19
L MAINTAINING GROUND STILL CAMERA SYSTEMS AND EQUIPMENT	15
I INSTALLING AND MAINTAINING PHOTOGRAPHIC PROCESSING EQUIPMENT	15
K MAINTAINING PRINTER SYSTEMS	10
M MAINTAINING GROUND MOTION PICTURE CAMERAS	9
O MAINTAINING AUDIOVISUAL EQUIPMENT	8
N MAINTAINING CAMERA ASSOCIATED EQUIPMENT	8

FIVE REPRESENTATIVE TASKS:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
J385 Align or adjust splicers	100
L686 Clean or lubricate copy cameras	100
M794 Clean or lubricate lens assemblies on ground motion picture cameras	100
N870 Assemble or disassemble power supplies, such as battery packs	100
M828 Remove or replace electrical drive assemblies or components on ground motion picture cameras	92

EQUIPMENT USED (50% OR MORE): Collimators, Motion Analyzers, Precision Measurement Gauges, Strobotacs, Tube Testers, VTVMs, Bench Grinders, Drill Presses

ONE HUNDRED PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING GROUND CAMERA SYSTEMS: Polaroid Land/ID, 4X5 Graflex, KE-46, 4X5 Calumet Studio, KE-48

THIRTY-ONE PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA SYSTEMS: DBM-5, DBM-4

GROUP ID NUMBER AND TITLE: GRP104 - MOTION PICTURE CAMERA GROUND MAINTENANCE PERSONNEL

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: TAC (44%), MAC (33%), AFSC (22%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40450 (78%), 40451 (11%), 40471 (11%)

AVERAGE GRADE: 3.9

AMOUNT OF SUPERVISION: 33% supervised an average of 2 subordinates

EXPRESSED JOB INTEREST: Dull 11%, So-So 22%, Interesting 67%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	44%	56%
PERCEIVED UTILIZATION OF TRAINING:	44%	56%

AVERAGE NUMBER OF TASKS PERFORMED: 144

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

M MAINTAINING GROUND MOTION PICTURE CAMERAS	65
G PERFORMING SHOP MAINTENANCE OF AIRCRAFT CAMERA SYSTEMS	11

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

M791 Clean or lubricate high speed 16mm ground motion picture cameras	100
M809 Operationally check footage counters on ground motion picture cameras	100
M842 Remove or replace shutter assemblies or components on ground motion picture cameras	100
M856 Visually inspect mechanical drive assemblies on ground motion picture cameras	89
G176 Adjust aircraft camera brake or clutch tension	56

EQUIPMENT USED (50% OR MORE): Pick-up Trucks, Boresighting Tools and Alignment Fixtures, Collimators, Precision Measurement Gauges, Strobotacs, VTVMs, Air Compressors, Bench Grinders, and Drill Presses

EIGHTY-NINE PERCENT OF THE MEMBERS MAINTAINED THE FOLLOWING AERIAL CAMERA SYSTEMS: DBM-5, DBM-4

GROUP ID NUMBER AND TITLE: GRP061 - AUDIOVISUAL EQUIPMENT TECHNICIANS

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: ATC (60%), AFLC (20%), ADC (20%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 40450 (60%), 40470 (40%)

AVERAGE GRADE: 4.2

AMOUNT OF SUPERVISION: 20% supervised 3 subordinates

EXPRESSED JOB INTEREST: Dull 20%, So-So 40%, Interesting 40%

	<u>Little Or Not At All</u>	<u>At Least Fairly Well</u>
PERCEIVED UTILIZATION OF TALENTS:	60%	40%
PERCEIVED UTILIZATION OF TRAINING:	100%	0%

AVERAGE NUMBER OF TASKS PERFORMED: 49

TIME SPENT ON DUTIES:

DUTY

AVERAGE PERCENT TIME
SPENT BY ALL MEMBERS

O MAINTAINING AUDIOVISUAL EQUIPMENT
E WORKING WITH FORMS, RECORDS, AND REPORTS

67
7

FIVE REPRESENTATIVE TASKS:

TASKS

PERCENT MEMBERS
PERFORMING

0921 Assemble or disassemble motion picture projectors
0915 Align or adjust still projectors
0937 Clean or lubricate still projectors
0940 Operationally check audio systems
E123 Maintain files of maintenance records

100
80
80
80
80

EQUIPMENT USED (50% OR MORE): Tube Testers